A century of hands : work, communities, and identities among the Ayt Khebbash fossil artisans in a Moroccan Oasis

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Chapter 4 – Sculpting the Town

4.1 Introduction

This chapter intends to be an ethnography of work in the Tafilalet town of Rissani, within the framework presented in chapters two and three about the socio-economic transformations. I will first set the context by looking at how the local population lived with the environmental hazard of flooding and subsequent water shortages, and then go on to describe the function of the town of Rissani as a regional economic centre and a labour market. Finally, I will treat the evolvement of the specific work domain of fossil sculpting, which is linked to the global market of tourism.

As discussed in the previous chapters, the drought of the 1980s forced the nomadic Amazigh population to sedentarise and live in villages and towns. On the other hand, the Imazighen were not only 'pushed' out of the desert, but also 'pulled' into the towns. The rural-rural migration structured the national process of integration into the global capitalist economy, wherein local towns such as Rissani and Erfoud became important labour markets absorbing the rural population in wage-earning jobs. Inspired by their interactions with the growing number of tourists in the 1970s to 1980s, the Imazighen realised the commercial value of the fossils and started to make a living from fossil extraction in the mountains and eventually in sculpting. The present chapter is about the process of the Ayt Khebbash nomads becoming fossil artisans, which is also a process of social identification, of becoming an 'Amazigh', and creating a new collective identity through work practice in the multi-ethnic town environment. By adopting the analytical framework of the 'community of practice' (Lave and Wenger 1991; Wenger 1998; Wenger and Snyder 2000; Wenger and McDermott 2002), I will argue that learning or failing to learn in apprenticeship is a process of participation that is at first 'peripheral', but increases in engagement, dis-engagement and complexity in the course of time. I will also demonstrate that in the process of recruitment, acquisition and transmission of skills, the Ayt Khebbash artisans do not always rely only on village-based family relations, but also make individualised efforts in order to secure their job and to become a *m'allem* (skilled master).

The social transformations brought about by the capitalist economic developments forced the Ayt Khebbash artisans to also engage in different types of communities of practice outside their work domain, in an effort to defend and reconstruct their identities. The Ayt Khebbash people's collective effort to claim land rights in Kudyet

Draoua, a territory to the southeast of Erfoud, is an acute example of this process. I shall examine the ways in which the Ayt Khebbash artisans responded to the changing political and legal framework of post-independence Morocco, and how they reconstructed their social identities of being 'Amazigh' and 'Ayt Khebbash' in their endeavour to gain access to local resources necessary for their new life in town.

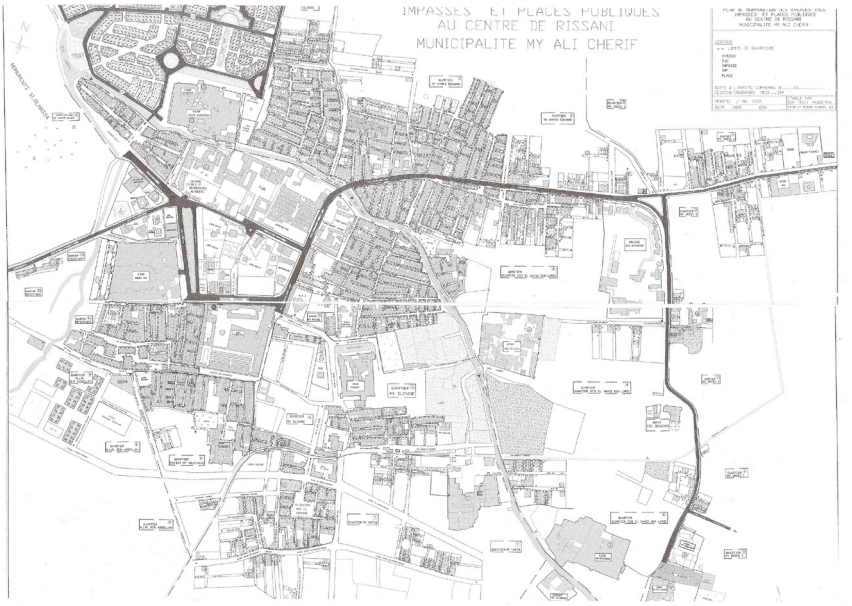
4.2 Rissani: Historical and Physical Context

> 'In 1965, Moulay Ali Cherif flooded: the water ran through the centre of Rissani – we constructed a small embankment with mud and stones in front of [*qṣar*] Abu Am. A lot of *qṣur* were destroyed or damaged … then we attempted to destroy the dams in Oued Amerbouh [in order to decrease the water flow in Oued Ziz, i.e., Rissani] and after that the situation got better. The water came back to the wells, and to the *khettara*. Later on the water left again … since 1974 or 1975 the drought began.'
> <Zakaria, 18 March 2013, Rissani, interview in Moroccan Arabic>

4.2.1 Crossing the Desert River

Since the time of Sijilmassa, life in the Tafilalet oasis has always been influenced by the constant battle against flooding and drought. Located at the southern end of the national route that connects Meknès to the Tafilalet, the town of Rissani is bound to the east by the Oued Amerbouh and the stony black desert of Ḥamada du Guir, to the west by Oued Rheris and Alnif, to the north by the oasis Oulad Zahra and the town of Erfoud, and to the south by the sand sea of Erg Chebbi, leading to the arid mountains of Adrar. Rissani is an urban commune administered by the Moulay Ali Cherif Municipality, which includes in its territory eleven modern quarters and eighteen *qṣur* (map 4-1). Situated in the plain of Tafilalet, the altitude is moderate, with stony mountains between 750 and 790 m high. The Oued Ziz runs through the town from the northwest to the southeast, exposing its dry river bed almost all year round – except when there are occasional rains from November to April.

Before the construction of the modern Oued Ziz Dam at Ar-Rachidia, the flood water periodically endangered human life in the Tafilalet, while replenishing the water table of the date palms and springs, cleansing the oasis environment and providing important water resources for the short and mid-term period (Miller 1995). As described by the elderly men of Rissani, in 1965 the rapid snow-melt in the eastern High Atlas



Map 4-1 Moulay Ali Cherif (Rissani) Municipality

mountains resulted in floods, flowing through numerous streams and channels used in traditional irrigation methods to replenish the water bed for date palm cultivation and agriculture. This event marked the beginning of the modern period in the Tafilalet, when the heavy rain in the mountains swept down to the Oued Ziz. It destroyed the dams, *segia* (irrigation channels) and *qṣur*, and many human lives were lost. In the wake of this disaster the Moroccan government initiated the construction of a dam in Ar-Rachidia, completed in 1971. A few years later, however, people started to suffer from a lack of water as the desert river dried up. Miller insists that this was a result of modern technological interventions. Since the construction of the dam, the oasis is no longer fed by the occasional flood of the Ziz, and the Tafilalet has become less moist and 'less healthy' (1995:65).

Due to the severe drought that befell the Tafilalet region, beginning in the mid-1970s and taking its full force in the 1980s, increased numbers of Ayt Aṭṭa and Dwimniaa[29] people were forced to abandon their pastoral way of life and find an income in the

29 The Dwimniaa speak an Algerian-Arabic dialect and live predominantly from agriculture. Originally they are from the southwestern region of Algeria and Oujda, Boudnib and Bouârfa; they started to settle in the Tafilalet oasis in the seventh century.

towns. On the other hand, approximately 70 per cent of the local *filali* (which literally means 'people of the Tafilalet', but usually refers to Arabic speakers only[30]) population emigrated to Fès, Meknès, Khemisset, Oujda, Casablanca, Tiflet and Rabat.[31] According to Abderrahmane El Maliki (1991), who studied the Arab *qṣar* population of this period, the death of the patriarch usually triggered the dispersion of a household, since family ties were one of the main reasons for people to remain within a *qṣar*. During the period from 1980 to 1985, the Ar-Rachidia Province region received at most only 200 mm rain per year, and there were several years without any rain at all. The migration of the population towards the north already had a long history, but this period of severe drought intensified the process: the *khettara* all dried up and there were virtually no agricultural activities possible, which resulted in massive out-migration of the local inhabitants.

El Maliki states that in *qṣar* Oulad Youssef water pumps for the wells were installed in 1986, although there were only three wells that actually produced water (1991: 64). The water was exclusively used for watering animals and for washing clothes. In 1974, the depth of the wells was twelve m, but in 1986 it had already reached 26 m. He writes, 'For those who didn't leave it was only the history and culture that bound people together to stay in the *qṣar*' (1991: 65), indicating the strong family ties and sentimental attachment to their land and traditions among the Arab inhabitants.[32] Some informants of the modern quarters say that nowadays in Rissani 'there is no wind', in contrast to the violent and chronic sand storms that used to occur during the period of the drought, when many people, especially children, suffered from eye diseases, such as trachoma, as well as from skin infections and severe respiratory problems. On the way to *qṣar* Mezguida from the centre of Rissani, we can still find the remains of a massive barrage, of which the water was reserved for agriculture and domestic animals. During the drought, people used to flock here to drink from the remaining water, which eventually dried up. Today we only see the children of the *qṣur* running around and

30 In the local context, *filali* (pl. *filaliyin*) means the (formerly) *qṣar*-dwelling Arab population. However, outside of the Tafilalet region, anyone from the region can be called a *filali*.

31 Chikhaoui (2002) points out that the present crisis of artisanal sector was accelerated by the urban explosion and massive rural-urban migration, which made it difficult for the authorities to implement public policies. See Chikhaoui 2002: 13-16.

32 One of the supposed differences between Arabs and Imazighen - that is locally believed to be true - is that the former feel strongly attached to their land, whereas the latter, as a result of their nomadic past, are more flexible in that respect.

playing football on the cracked, thirsty ground which used to be a reservoir. A former *qṣar* dweller and a civil servant in his late forties recalls his time in college during the drought:

> 'In the eighties, I was a college student. In the mornings when I got up, I couldn't find any water to perform my ablution. We used to go very far in search of wells to fetch water to the mosque of our *qṣar* [Oulad Abdelhalim]. At other times, there was an occasional lorry that brought water from Jorf – 40 kilometres away [from Rissani]. We bought water for 50 centimes per litre. Also, there were problems regarding the construction of houses, since they needed water for the production of concrete … Many of my friends and relatives migrated to the cities.'
> <Rida, 11 May 2013, Rissani, interview in French>

In other words, during the drought Rissani and the Tafilalet region as a whole underwent the greatest demographic transformation in its history. As a result of the massive out-migration, the ethnic composition of the Rissani population has changed. Including the 9000 inhabitants of the eighteen *qṣur* of Rissani Municipality, it is estimated that the Arabs amount to 47 per cent, Amazigh 30 per cent, Ḥaratin 18 per cent, and Dwimniaa 5 per cent.[33] If we exclude the *qṣar* population and only look at the eleven modern quarters in the town centre, we find a dramatic decrease of the Arab proportion to around 30 per cent. The majority of the inhabitants are Amazigh (50 per cent), with some Ḥaratin and Dwimniaa.

4.2.2 Going down to the *Suq*

'Belkacem[34] (a resistance fighter from Oujda) departed, and the French came in. They ordered the people of Abu Am to destroy all that had been built by Belkacem, because they needed to construct their own administrative post.' Two elderly Arab men, in-

33 This is an estimation made by the Rissani Municipality based on their statistics.

34 Belkacem Enghadi was a militant, originally from the region of Oujda, who governed Rissani before the French colonisation. It is locally believed that he was dispatched by the Sultan to fight against the French forces, but since the central state was weak at that time, he governed Rissani independently. When the French occupied Rissani in 1931 without much resistance, following the historic battle of 1926, Belkacem still attempted to fight back against them from Qṣar Tiaarimt. After the defeat, he escaped and asked for help from the tribe of Ayt Isfoul, but to no avail. Later on, according to some sources, such as the work of Bourchoq (1991/1992) and Rissani informants, he cooperated with Ayt Khebbash in an attempt to drive out the French forces from the Tafilalet.

tensely tanned, one in *jellaba* and wearing a cap, the other in a faded navy jacket, sat at the terrace of a café at the entrance of the artisanal district Moqaouama, recalling the beginning of the town formation in the 1930s. One was a Rissani native and the other originally from Beni Mellal. The Mellali confidently pointed his finger to the *qṣar* Abu Am right in front of the café, claiming that his father was the one who helped Belkacem make peace with its inhabitants. After the French occupation of the town, he says, his father was in charge of taking care of the nationalist prisoners in Alnif.

The remains of Abu Am are still overlooking the modern quarters of Rissani – the mud-brick defensive walls facing the town centre are still intact, although only few Arab families continue to live there. Rissani before the French colonial period consisted of several of such *qṣur* spread out in the oasis and a *suq* in the town centre. Grown into a modern town with eleven districts administered by the Moulay Ali Cherif Municipality, *qṣur* in the Cercle Rissani have seemingly become a remnant of the past, whilst the life of the town continues to be synonymous to '*suq*' (market). There are still 9000 inhabitants (mostly Arabs) living inside the eighteen *qṣur*, but many families have moved out to the modern quarters. On the other hand, the function and meaning of *suq* remains strongly attached to the globally influenced lifestyle of the people. In other words, *suq* is a living cultural form and a social institution as well as an economic system. As Geertz observed in the Middle Atlas town of Sefrou, *suq* is more than a place for people to come to every day in order to meet one another – it is a 'distinctive system of social relationships centring around the production and consumption of goods and services' (1979: 124).

When a Rissani inhabitant says *addugh gr suq* or *nemshi l-suq* ('I am going to the *suq'* in Tamazight and Arabic, respectively), it does not necessarily mean that he is going out for shopping in the market. In a broad sense, *suq n rissani* is the market, marketplace, and the town centre where one finds the cafés, grocery shops, and the mechanics along the main road of Avenue Hassan II: it is the area that is commercial as opposed to residential. In a narrow sense, *suq* means the municipal market of Rissani, where the population of the region gathers on Tuesdays, Thursdays and Sundays to sell and buy their food and common provisions. In addition, the animal trade (*raḥbat* [or *suq*] *shyah* 'sheep and goat market', *raḥbat l-bgar* 'cattle market', and *raḥbat l-behaym*[35] 'donkey market'), the *suq l-fuul* 'bean market', and numerous vegetable sellers

35 *Behaym* is the plural of *bhima* 'animal'. Therefore, all animal markets including sheep, goats, cattle and donkeys can all be collectively designated as *raḥbat*/*suq l-behaym*. However, since the term 'donkey'

stretch outside the southwestern gate of the covered district, and are also part of the *suq* as a specialised marketplace. Therefore, when a non-local – someone from Tafraoute or Lahfira, for instance –, says 'I am going to the *suq*', it will most definitely mean that he is going on a shopping trip to any market of Rissani. On the other hand, for the locals, *suq* indicates a meeting point, a social sphere in the centre where they meet with friends, exchange greetings and information, as well as engage in commercial transactions. In either case, time and space of the dusty oasis town is controlled by the centuries-old human activities embedded in the battered, but familiar walls of the old *suq*.

When the French tanks ripped through the Avenue Mohammed V in 1933, the Qaṣbah[36] Abu Kacem Ziyani and the adjacent quarter constituted the urban centre of Rissani; no other urban quarters existed. The present Alaouite Research Centre's building housed the military command post, and the town began to take its form as a colonial administrative centre, symbolising the final conquest of the Tafilalet tribes. Right in front of the demolished ruins of Qaṣbah Ziyani, the oldest café in the town still exists, serving agreeable café noir, café au lait and orange juice. A retired civil servant recalls the time in the 1970s, when this café used to be seedy and decadent, serving alcohol brewed from dates. There was another café, he said, adjacent to this one which was run by a Jewish man. 'A Jew in the 1970s?' I asked back, and he replied that although most of the Jewish population had left Rissani in the 1960s for occupied Palestine, a few non-Moroccan Jews remained. 'They [the Jews] were so inventive', he went on, 'they usually ran jewellery shops, tanneries, or weaving *ateliers*, but not only that: they were the first who brought the camera to town. We used to go to their laboratories for photos – you know, the old fashioned way that involves dipping the picture into water, then it comes out'.

The modern quarters continued to expand after the Moroccan independence (1956), and the population kept growing: from 2844 in 1960 to 3565 in 1971 and further to 4985 in 1982 (*Population Legale du Maroc* 1983). The statistics of 1994 shows it further

(*ḥmar* or *aghyul*) is often used as an insult, the locals consider the term as vulgar and tend to uniquely designate the donkey market as *suq l-behaym* 'animal market' instead.

36 *Qaṣbah* is a term that specifically indicates a type of village (*qṣar*) that is surrounded by mud-brick defensive walls and has a square that functions as a political centre; it is governed by a single figure. Whereas *qṣar* is a term that may refer to any small village, with or without surrounding walls. Some examples are: Qṣar Melhaj, Qṣar Chaïb er Ras, Qṣar Taouz, Qṣar Bouhamid.

quadrupled to 18,450 and it reached 20,456 in 2004 (*Monografia baladia Moulay Ali Cherif* 2009). When we look at the Quarters Moulay Hafid and Moulay Slimane (previously Bouhamid Quarter together), two of the older quarters in Rissani that started to grow in the late 1970s, we see a marked population increase during the drought period (1980s), reaching its peak in the 1990s and 2000s (appendix 1).

According to my survey of 50 households in these quarters, 24 families belonged to the Ayt Aṭṭa or other Amazigh groups, 14 were Arab (Shorfa and Aḥrar), 5 Saḥrawi (Ḥassania speaking nomadic group), 5 Ḥaratin and 2 Ismkhan (appendix 1). This result corresponds to the Municipality's estimation of the ethnic ratio, according to which 50 to 60 per cent of the modern quarters is occupied by Amazigh (Ayt Aṭṭa, mostly Ayt Khebbash) immigrants from the Tafraoute and Taouz areas. Most of the Arab population came in from the nearby *qṣur*, such as Abu Am, El Ghorfa and Tabassamt. The majority of the Amazigh population in Rissani first moved into the Moulay Hafid and Moulay Slimane quarters, and later some of them changed their residence to other newer quarters, such as Moqaouama. In terms of occupation, we see that there are several household heads who are retired from military service and living on their pensions. The younger male family members are usually engaged in seasonal construction work, fossil sculpting, or petty commerce. Initially, the population in Bouhamid was to a significant extent divided into Arab and Berber quarters, but nowadays they are intermingled with no marked residential divides. However, the socialising circles are often self-contained with very little intermarriage occurring between the different groups.

As mentioned earlier, the Ayt Khebbash is the predominant Amazigh group in Rissani, also in the domain of fossil sculpting and other mining work in general. Although there are a few Arab groups working in fossil sculpting in other towns such as Erfoud and Midelt, I limited my surveys, interviews, and analysis to artisans who are mostly from the Ayt Khebbash group, since 99 per cent of the artisans in the fossil domain in Rissani belong to either that, or the Amazigh group.

4.3 Moving out of the Village: *Les Pierres Noires*

> '[In the mountains] we found the trace on the surface of the rock, and we were sure there was something inside the black stone ... initially, we sold the raw [fossilised] stones to foreigners. Then I bought a hammer, and then a chisel, a shovel, and a pick. I moved to Rissani [from Tafraoute] in 1996, and finally bought a house ...'
> <Amar, 14 June 2012, Rissani>

4.3.1 The Development of Fossil Extraction Work

The fossil sculpting domain did not start as 'sculpting', but as spontaneous 'extracting' work in the mountains before the influx of Amazigh population into the towns. People tell that the first foreigner who systematically began to establish 'fossil sculpting' as a domain of work was a Frenchman from Bordeaux. He came to Rissani in the 1970s, established an association in Casablanca, and worked with Ayt Khebbash men from Amerbouh and Mezguida. According to the brother of the Ayt Khebbash man from Mezguida who still lives in Rissani, the Frenchman taught them how to identify fossils in the mountains and how to cut the rock into blocks, before transporting them to the workshops in Casablanca. The raw materials were sculpted in accordance with European production standards, and then exported to France. Later on, several Europeans in search of fossils followed suit and a growing number of Arab and Amazigh intermediaries started buying raw materials, usually from Amazigh nomads living in the Taouz and Tafraoute region who were familiar with the mountains. A fossil artisan in Rissani recalls how he got into the domain in the 1980s:

> *Aissa*: 'I was living around Laatchana, near Fezzou [Tafraoute area]. I was a nomad, following my goats when I found those [fossilised] stones. You know I often pass by these places where you find the fossils. But then I was not interested. Later, there were some people from Rissani and Erfoud, generally people working in the tourism domain, who asked us where they could find such stones. So I decided to collect these stones, since I said to myself, "If they are sought-after, they can be sold". One day I came here to the *suq* of Rissani and was instructed to meet M.'
> *Question*: Who is this man?
> *Aissa*: 'He makes caps and puts them on a table in the bazaar to sell. Together with these caps, he also displayed some fossils and minerals. I showed him my fossils [phacops] wrapped in a cloth, and he gave me 45 DH for them. This was my

> first income from fossils; and so I continued to collect them. I got a hammer and extracted them from the mountains. Me and my friends … sometimes we got broken pieces, sometimes complete objects … Later I quit being a herder and settled down in Lahfira. I separated from my brothers and went on with my friends to engage in fossil extraction. The Rissani men [intermediaries] bought them from us.'
> <22 January 2013, Rissani>

In the pioneering days, the Amazigh nomads worked in fossil extraction in the mountains while they lived in the surrounding villages and were active in animal herding and agriculture at the same time. Several foreigners informed the locals that the fossils could be a source of income, and encouraged them to work in extractions. A veteran sculptor from Alnif said:

> 'One day he [a European, possibly a geologist] climbed the mountain with some locals and he found the mines; this way they started to go to the mountains more often, since before that, they didn't know where to find the veins [of fossils]. When there are no fossils on the surface, some people search for traces earlier extractions, and like this the mines were exploited and all the villagers started to earn cash. We sold everything.'
> <M'hamed, 21 May 2013, Erfoud>

The extraction method, until today, remains fairly rudimentary and informal. Once the local Imazighen got preliminary knowledge of where to look for fossils, they went to the mountains near Erfoud and Rissani, such as Imertrof and Amar, and worked there with hammer, pickaxe, and shovel to dig out ammonites, trilobites, and orthoceras[37] from the carbonated strata. Apart from the initial instructions given by European geologists, the way locals work in the mountains is not based upon strict cartographic knowledge, nor do they receive any scientific assistance; they learned how to extract fossils without damaging them from experience. 'We are certain ourselves [that there are fossils inside the stone]. If they form a long line, for sure there is something inside there. We have experience in lead [extraction], we dug and extracted the stone, and found the fossilised insect [*tabkhusht*] inside the gravel. We used to sell those raw blocks for about six years', an artisan explained. As a matter of fact, the great

37 Orthoceras (meaning 'straight horn') is an extinct nautiloid cephalopod, that existed between the Ordovician and Triassic periods. It is commonly found in limestones, and has straight and elongate shells which come in a variety of sizes from two cm to one m.

majority of the extraction work remains unauthorised. Still now, there are only five persons in Erfoud and Rissani who are authorised extractors and pay taxes.

4.3.2 Tools and Techniques

Individuals who are authorised to systematically work in the fossil domain use semi-industrial instruments, such as cranes, compressors, and various electric tools. They have been authorised by the Ministry of Interior to explore particular mines, and hire several workers on site and for transport. They treat and craft the raw material in their *ateliers* in Erfoud, or commission it to the artisans.

'I first saw the fossils in Melhaj [village in Taouz region], when I was visiting my aunt', a Rissani sculptor recalled. Melhaj is one of the first villages where the Imazighen started extracting and polishing fossils. 'I found the children [of my aunt] polishing the fossils. Some people were working with manual tools', he said. Initially, they just sold the raw stones, but upon the suggestions of European geologists, tourists, and Moroccan intermediaries they eventually created effective methods to work the stones using cutting tools, sand polish, and oil treatment. One of the tools they invented was a *ziyar*, a thick tree trunk with a metal handle attached to the side. It is said that it was first created by the men of Lahfira, and later became popular among the village artisans. The top surface of a *ziyar* is vertically cut in two, so that one can place a trilobite inside. The wood is tightened by the handle to secure the trilobite stone, so the artisan can work on it without the object moving around. A Rissani artisan told me about his experience with tools in the pioneering years:

> 'In the 1990s we already started to sculpt, using the pic. There was nobody who could teach us how to sculpt … but I heard from my clients that someone else knew a way to dig out the insect in the middle of the stone. We also invented the *ziyar*, the cylindrically shaped tree trunk. Our neighbour in Lahfira, named Hassan, was the first [to invent it]. But we had already discussed before how to fix the stone in order to sculpt it. He took the piece of wood and cut out a little hole in the middle. Afterwards, it was Hmad Ou Ali who modified this tool by cutting the wood in two pieces and putting a metal bar across, in such a way that you can tighten and loosen it [the gap]. Before inventing this tool, I used to fix the stone in between my legs. After we got the *ziyar,* all of us started to use it. There was a woodworker in the village; it was him who used to make it from then on.'
> <Abdelatif, 22 January 2013, Rissani>

The initial development of fossil extraction and the invention of tools had little to do with centralised Moroccan state policies. Rather, the ideas and methods were developed through the imposition of the foreigners' tastes, which brought with it the European dominant culture and academic definitions of quality standards set by the international scientific community (Cf. Herzfeld 2003). The newly developed fossil sector provided considerable economic benefits to the local population, yet the absence of regulations and legal measures were an obstacle for its development. On the other hand, the lack of state intervention allowed the sector to grow spontaneously, which often resulted in the discovery of 'rare species' which were considered scientifically important, and also contributed to the birth of creative ideas for developing tools and object designs.

In Rissani, the process of craft production starts with cutting the large blocks that contain fossilised stones into smaller pieces, using the industrial saw, which is capable of cutting pieces of up to 2 metres wide. Since it is an expensive saw, only a limited number of artisans are able to afford it. Most artisans buy pre-cut pieces from others who do own the machine, or they crush the dug out rocks into smaller pieces using a sledgehammer. The second step is to trace the object they wish to create, using a small hand-held saw. After this stage, the artisans need to closely look at the rock to identify which parts contain fossils that they want to preserve in the object design. Cutting the rock while preserving the fossil inside is a very difficult part of their work that requires experience and patience. In the case of trilobite sculpting, they use the electric chisel '*chicago*' to sculpt out the creature inside the rock; this may easily take several weeks. For sculpting ammonites and goniatites, the artisans use the medium-scale electric saw '*dynamo*', while for rounded objects, such as washbasins, bowls, or small boxes they use the machine *teqqaba* (an Arabic term that means 'hole-digger'). When they have finished cutting out the object, they use grindstone and water to pre-polish it, before applying the final touch with sand paper.

For the decorative objects such as plaques, washbasins, mirrors, ashtrays and boxes, it is very common to paste the fossils cut from another stone onto the object as a part of their design. This will reduce the object value for the European consumers, but unless s/he is a geologist or an experienced connoisseur, the trick cannot be identified. For example, the large-size natural orthoceras are always excavated in small broken pieces, so it is impossible to create a perfect object without artful pasting. The artisans carefully assemble the bits and pieces and paste them onto a long, rectangular fossil

plaque, in the way of a jigsaw puzzle. For the missing parts they put a different stone of the right size instead, and then polish it to perfection.

Many of the artisans make a distinction between the old manual tools they had been using since the beginning of their careers, and the new electric machines they bought after moving to town. When I visited the *atelier* of Oualid, an Ayt Khebbash artisan from Tafraoute, he was mostly working with the electric chisel '*chicago*'; one with a medium-sized head and another with a smaller head to sculpt the details of trilobites. However, he still kept his old and worn hammer and chisel, which were the first tools he used when he started working in fossil sculpting in his home village. 'I will never give up my old tools, because I feel they are an extension of myself and my life', he explained: 'There are memories in my tools. Thanks to them I could earn money and buy my house in Rissani'. Most of the Ayt Khebbash artisans share the feeling of attachment to the old, rudimentary tools, since they associate them to their idealised vision of the home villages, and also to their success in accumulating wealth in the town. On the other hand, the artisans take a distant and realistic view towards the newly introduced electric machines. Another artisan from Tafraoute jokingly expressed that 'My old tools are like my lover with whom I parted a long time ago. Whereas the machines, which cost me a lot of money, they are like a car that needs constant maintenance and surveillance'. Apparently, he does not feel anything sentimental towards the electrically operated machines, which are convenient, but dangerous at the same time; the artisans usually have several cuts and wounds on their hands from the razor-sharp disc '*diamond*' attached to the '*dynamo*', caused by sculpting objects such as goniatites, ammonites or small ashtrays. Expensive machines often evoke the money the artisans spend on purchasing cars, which is a symbol of success but something they have to be cautious with. In such a way the electric machines are associated with the artisans' experiences living in town, the place where they find some material comfort, but also feel unfamiliar and withdrawn.

4.3.3 From Raw Material to Craft

At the beginning of the 1970s the raw materials were directly sent to the factories in Casablanca for sculpting and treatment, but in due course the *ateliers* for sculpting and polishing fossils started to take shape in towns such as Rissani, Erfoud and Alnif. The Artisanal Delegation in Ar-Rachidia classifies fossils as artisanal materials into two categories; 1) the trilobite sculpting and 2) the 'polishing' of other design objects such as tables, washbasins, ash trays and bowls containing ammonites, orthoceras

and goniatites, or those fossils alone polished for decorative purposes. According to *Etude sur le secteur des spécimens minéralogiques et fossiles* (*'Study of Mineral and Fossil Specimens'* 2002), there are three categories of fossil *ateliers* in the polishing category, classified based on the nature and number of machines and tools they utilise:

> Class 1: Large *ateliers*. These are well-structured and organised *ateliers*, belonging to companies. These factories utilise large-scale machines (stone-cutting machines, sawmills, chainsaws, drilling machines, electric drills, etc.). They specialise in manufacturing tables, plates and other polished products. There are only four of such *ateliers* in Erfoud and the entire region.
> Class 2: Medium *ateliers*. These utilise machines of medium capacity (drilling machines, polishers, *dynamo*s with different heads). There are thirteen *ateliers* in Erfoud and two in Rissani in this category.
> Class 3: Small *ateliers*. This class regroups the majority of the artisans of the Tafilalet region. The machines and tools they utilise consist of small portable drilling machines, *dynamo*s with different heads, hammers and chisels. The artisans of this class perform all stages of treatments.

The trilobite *ateliers* can be classified into two classes:

> Class 1: This class utilises modern machines and tools such as binocular loups, micro-hammer sculptors, and micro-fraises. It is estimated there are no more than ten artisans in this class.
> Class 2: This class comprises the majority of artisans (about fifty). They do not use electric machines, and in the 1980s they only used manual tools. There are several in the Alnif region and they work at the extraction sites, at home or in the garages (*ateliers*).

Nowadays there are virtually no artisans who do not work with electric tools, but this categorisation can still be used with regard to the size and number of machines they employ in their *ateliers*. In Rissani, there are approximately fifty artisans, belonging to Classes 2 and 3, who are member of the Association Ayt Aṭṭa for fossil sculpting in Rissani. Although the total number of unregistered artisans is hard to establish, the Ministry of Tourism estimates that there are approximately 300 Class 2 artisans in Rissani alone, who constitute the majority of the fossil sector in the town. Therefore, my research is limited to this artisan group in Rissani.

The incorporation of electric machines in towns were one of the main reasons for the Amazigh nomads to leave the villages, since at that time there was no electricity outside the towns and therefore the villagers had to work with manual tools. Simultaneously, by the time they were discovering the commercial value of fossils, the drought forced them to abandon their pastoral way of life. The *muqaddam* of Tafraoute recalls that in the 1980s the well water got increasingly salty, making it difficult to use in agriculture. 'Only those who got a water pump could improve the situation. Water provision had become scarce. Many of the palm trees died'. In other words, in the 1980s the Tafilalet witnessed a massive out-migration of *qṣar* inhabitants (Arab population) into large cities (rural-urban migration), whereas the nomadic population continued to flow into local market towns (rural-rural migration). Most of the Ayt Khebbash migrants found their subsistence in fossil sculpting, or worked as animal sellers and taxi drivers.

It is not easy to categorise the Ayt Khebbash migration patterns, but their immigration to the Tafilalet towns is usually accompanied by their family members, unlike their seasonal work in large cities where only single men go to earn cash and eventually return to their home villages. The movement of nomadic and village population into local towns is a permanent one: at first the single or married men move in, rent a house and find work, then they eventually invite their brothers, wives and parents to settle down permanently.

However, although they usually try to build their residence in a particular locale, the life of Ayt Khebbash men is an eternal cycle of wandering. The fossil artisans, for example, do not show a typical sense of attachment to their profession as we expect from artisans, but are always willing to change their job in favour of higher income generating activities of the moment. Many of them have experience working in cities such as Nador, Tanger, Casablanca and Agadir, where they engaged in construction work or petty commerce. This typically resulted in short-term migration, eventually returning to their homes, although there are a few exceptions – those who built a fortune during the construction boom of 1970s remained in cities. Once they return home, they continue with the fossil sculpting or start investing in the hotel business or barite and lead mining. They can also work in several different domains at once: one remains in fossil sculpting and his brother temporarily goes for barite mining, for instance. They habitually foster and juggle their work identities in their new situations in town, by reconstructing the same type of social order which was evolving in

their nomadic past. Adapting or resisting to a new social reality requires employing the cultural habits which they nurtured during centuries of nomadic life across the desert rivers.

4.4 Coming to the Town: Apprenticeship in Fossil Sculpting

> 'I worked with ammonites and goniatites. There are people who are knowledgeable in this domain, those who passed some time in the work. They can see the veins of origin without talking about the pieces, since the vein is under a rectangular form, but it contains the pieces inside without being apparent. We take the hammer and we break the rock very carefully [after extraction]. When we see the trace of the fossilised insect, it shows as a white stain, we leave this part that contains the trace, and we take the chisel and we sculpt its surroundings, to draw out the boundary of the piece. But at the same time you need to know the face and back of the piece …'
> <Abdelkrim, 22 January 2013, Rissani>

4.4.1 Nomadic Learning

Abdelkrim, an Ayt Khebbash man with many jobs, is in his early forties, now working as a barite artisan. Once a herder in the region of Bou Maïz, 30 km south of Rissani, he moved to the village of Melhaj in 1989 to work in the fossil domain. 'There were so many people who were working with fossils, those from Merzouga, Hassi Labied, Melhaj…I was in Bou Maïz before settling into Melhaj', he says. He started his work by learning the tasks at the artisans' mining site or *atelier*. It were these people who offered him the information, such as how to make the chimney, how to know the depth of the vein, how to dig it, how to extract from the surface, and how to prepare the stone containing ammonites. He worked in extraction and later in sculpting for five years, then he travelled to the north, mainly in the province of Nador, and engaged in construction work and brick factories in Tafarsite. After some years, when he renewed his identity card, he decided to obtain a driver's licence. He returned home to the Tafilalet, settled down in Rissani and became a truck driver, but eventually started to seek for opportunities in barite mining since 2010.

With artisans changing their jobs and residence so many times, it is hard to picture the domain of fossil as the techniques and arts transmitted from one generation of craftsmen to another through a classic form of apprenticeship, often affiliated with guilds

that require semi-permanent commitment. The fossil domain defies categorisation, other than that it is another income generating activity through manual labour; it is impossible to put the domain next to the realm of other centuries-old Rissani artisanal traditions such as pottery, woodwork, metal work, tanning and basket weaving. The only common characteristic of all of the artisanal sectors in Rissani, including the fossil trade, is that none of them are organised into craft guilds, but remain to be unregulated family or kin-based businesses. If we follow the official definition, the fossil extraction is 'regulated' by the Ministry of Energy and Mining, whereas the fossil sculpting is under control of the Artisanal Delegation, but in fact the two sectors remain to be an informal economic activity which is seamlessly incorporated into the changing life stages of local Ayt Khebbash men.

Fossil work itself is unrelated to Islamic art and religious education; it is a recent invention by the local population in response to European craft knowledge, scientific values and consumer demands. Ibish argues that in the Muslim world, the impact of European colonialist expansion and capitalist ventures displaced many locally made commodities, replacing these with mass produced European goods (1980). Also, the reorganisation of government structures in accordance with colonial models served to weaken the power of local craft guilds. In Morocco, the Protectorate government attempted to strengthen the traditional craft economy and for this purpose restructured Moroccan craft workshops by shifting their control from guilds to the French authorities (Irbouh 2005). As a result, the Moroccan craftsmen adopted French instruction as well as their modes of production, through formation in vocational schools. Irbouh points out that the art schools created by the colonial administration in large cities such as Casablanca, Rabat, Marrakech, Fès and Meknès played an important role in diffusing French colonial cultural hegemony, for instance by producing a subordinate work force that served the interest of the colonial state (2005: 2). In the case of Rissani, the historically fostered social and economic ties of the local Arab artisanal groups deteriorated due to this establishment of urban craft centres which was one of the causes of massive rural-urban migration of skilled artisans in search of better paid jobs. On the other hand, the fossil domain emerged in the 1970s as a 'gold rush' for the nomadic population flowing into local towns. In other words, the birth of the fossil and mining sectors in the Tafilalet is rooted in complex historical factors in a process of globalisation that first grew out of European colonialist ambitions, and was subsequently accelerated by the compelling forces of world capitalism, as manifested in the development of new commodities and markets.

For this reason, the 'fossil artisans' of Rissani are not comparable to those artisans characterised by their inherited skills and pride of their professions, such as with those minaret building artisans in Yemen described in the work of Marchand (2001). The fossil artisans are un-rooted, in a sense that their identities are not fixed to this particular work, and that the domain itself is unrelated to existing local traditions. Therefore, their apprenticeship must be seen in a different light, opposed to the assumption that it requires high levels of knowledge and skill that generates equally high levels of social respect. Although the fossil sculpting necessitates specialised knowledge and skills, the period of apprenticeship, either formal or informal, lasts for only one or two years at most. Thereafter they become independent sculptors. Whatever hardship or skills it requires, the work is considered as an informal and temporary occupation that the artisans are willing to quit whenever another job opportunity comes up. There are, of course, those veteran artisans who continue to work for decades and will not quit until their voluntary retirement. Even though they express enthusiasm for their work, they say 'we stay in the domain because we have no other options'.

4.4.2 Apprenticeship in the Moqaouama Quarter

Many artisans learn the skill collectively by working with their brothers or relatives in their home village, while others come to town and become an apprentice in the *atelier* of a *mʕallem* (skilled master). In Rissani, the artisanal quarter Moqaouama started to take its form in the 1980s on the southwestern side of the *suq*. In the narrow and dusty alleyways leading from the southern gate of the *suq*, there are a number of small *ateliers* for wood workers, often with artisans working on the street. Soon after the road gets wider and a relatively open space with several garages of fossil artisans appears. Right at the corner, the animal selling trucks pass by in the morning to unload the chicken, leaving behind a strong putrid odour. The artisans are rather unconcerned by it, even less concerned about the clamour of their own cutting machines '*dynamo*'. This is the first location where the fossil work started to develop – the artisans rent a garage to store their objects, and work with small to medium machines and tools, not in a blessed condition except for the supply of electricity. Passing through this street lined by garages, there are few more wood workers and metal workers, next to the small alleyway of old but enduring brothels (which finally closed down their business sometime around January 2014), and few metres further west an open space appears which looks more desert-like, dotted with a few modern houses and palm groves. There we find the second fossil garage area, a recent creation by those artisans wishing to work in a more isolated and open environment where they don't need to care

about noise complaints from the neighbourhood. The difference from the first garage street is that all of the garages have been bought by the artisans. This area started to develop in the 1990s and approximately twenty Ayt Khebbash men work there in their own *ateliers*. During my fieldwork I rented a house in this area, which my landlady jokingly called 'the second Tafraoute' – due to the fact that many of the inhabitants were originally from the Tafraoute region, and the spacious landscape reminded us of the village rather than the typical Rissani townscape where numerous tiny houses attached to each other are squeezed into narrow alleyways.

The layout of the Moqaouama Quarter speaks for what it is – a village in a town, sculpted out by the practical activities of everyday life. The quarter retains village-like characteristics, as everyone knows each other, visits each other and their places of origin are mostly limited to Tafraoute and Taouz areas. Hence the quarter is full of family members and kin groups. The apprenticeship of a fossil artisan is, therefore, home-grown – an integral part of existing social spheres, even though the commercial value of fossil crafts are validated by Western standards. The Moqaouama Quarter came into existence in the 1980s, when the Ayt Khebbash men started to move in and rent the garages for work. A veteran fossil merchant, Moha, who owns a large shop on the Merzouga route at the end of Rissani says he rented his small garage in Moqaouama and worked there for some years before moving out to the current location:

> 'My brother worked since 1980, and I joined him after quitting school in 1987. I started with ammonites, polishing them with sand paper and cleaning with water. Later, my brother needed help in his work so we started working together with small machines. We rented a garage in Moqaouama and there we worked for two years … there was only me and my brother [working there] during that period. We needed more workers, so we hired four. And then we worked there for six years. Later we bought the land here on the Moulay Ali Cherif route, and employed twelve workers. We bought more machines …'
> <Moha, 9 February 2013, Rissani>

By 1990, the fossil street contained approximately twenty garages with *mʕallem*-s and apprentices from different villages of the region, mostly from the Ayt Khebbash group, with very few Arabs. Craftsmanship itself has a long history in Morocco: carpet weaving, woodwork, metalwork, pottery, blacksmith, leather work, tailoring … etc., and indeed some of the Ayt Khebbash women are skilled craftspeople, as described

by Cynthia Becker (2000; 2006) in her study of art and gender of the tribe. However, the Rissani artisanal sector is historically dominated by Arabs, and the Ayt Khebbash men who started working in fossil sculpting are neither part of the Rissani artisanal tradition nor of the Ayt Khebbash craft practices which are exclusively the domain of women. Rather, the fossil craftwork should be placed in the historical process of herding, agriculture and mining work of Ayt Khebbash men. These everyday experiences fostered the contemporary practices of fossil craft apprenticeship.

The study of craft apprenticeship started with the aim to find a form of education that might be compared with Western schooling but was locally rooted. In other words, I understand the apprenticeship as a typical example of an informal education embedded in the practical activities of daily life. Lave (2011) argued in her study of Vai and Gola tailors in Liberia that the notion of learning through apprenticeships is a matter of 'legitimate peripheral participation' in 'communities of practice', in which the apprentices engage in structured patterns of learning experiences without being taught to become skilled and respected master artisans (Lave 2011; Lave and Wenger 1991). The notion of 'legitimate peripheral participation' is useful when looking at the relations between newcomers and old-timers. It focuses on activities, identity transformations, and communities of tacit knowledge and practice, and explains the ways in which newcomers become part of a community of practice. Furthermore, Lave and Wenger insist that this learning process is 'situated', from the perspective that knowledge and learning are relational, and that meaning is 'negotiated' in the context of informal, experience-based learning (1991). The apprentices are not merely receiving factual knowledge about the world, but are active agents who reconstruct the meaning of past and future in understanding the present circumstances.

As noted earlier, apprenticeship in fossil sculpting happens as a way of – and in the course of – daily life. Without recognising it as a permanent profession, the Ayt Khebbash men enter the apprenticeship stage informally by observing others and absorbing the techniques of extraction and eventually of the crafting skills. It can be regarded as another set of subsistence skills built upon their tacit knowledge learnt from their parents, but more specialised and driven by power relations imposed by the West. A *mʕallem* in his mid-thirties, Ishou, is someone who learnt sculpting skills after coming to Rissani and by undertaking apprenticeship in several different *ateliers*. Unlike most of the artisans who never went to school, he received a primary school education in his village and speaks some French. He told me about the days when he

first came to Rissani;

> *Ishou*: 'You know in the village, agriculture became impossible due to the lack of water. There were the people from my village [in Rissani], the neighbours. They worked already [in the fossil craft] and it was them who suggested to come here [in 1997]. The first time I worked at Ali Oufkir, but after two days I fell terribly sick, so much that I had to return to my village. After two or three months I came back again, but the job was taken by someone else, so I went to work for Bassou, who is from my village. But he didn't work regularly since sometimes he didn't bring us the raw materials to work on … One day I went to search for work at Hamou [deceased now], and we agreed on the salary of 30 DH per day, since I had already worked for 25 DH before.
> *Question*: What did you do at his *atelier*?
> *Ishou*: 'He [Hamou] told me to wash the goniatites, the big ones … and in order to wash, you have to polish with the help of paper and water, at that time we didn't have acid that we use now to ease the task. I believed that this washing was the same as washing the dishes: the patron came back after few minutes and he found I washed five or six pieces, he said, "It's not like this. You wash it gently and carefully even it takes time".'
> <9 February 2013, Rissani>

The apprenticeship typically starts with washing and polishing the fossils by hand. It is the easiest and most mundane task which they all have to learn at first. Later, Ishou went on to work for another master and there he learnt to work with chisel and hammer, and then moved on to work with electric machines. He learnt to work with these tools by observing other young apprentices, and asked them how to do it. In this period he saw the master working on a decorative ashtray in the shape of 'Fatima's hand', which was designed by a *mʕallem* who commissioned them to do the finishing task. Ishou worked for him for three to four months, then he found another master, Mbarek, who was working on a large decorative plate. Since Mbarek was receiving many orders, he proposed to pay Ishou by the piece. There, Ishou worked for two years, and later on Mbarek paid him 50 DH per day. At that time Ishou was working on the task of cutting the large rocks into pieces using the industrial saw operated in water:

> 'At Mbarek's *atelier* I gained a lot of experience. I started to work as a *mʕallem*. There were other workers, but it was me who directed. There are some patrons who don't leave the machines for the workers to use freely for fear of damage, but Mbarek was not afraid of that; we could work with any machines, and thanks to that I could learn quickly. But there are still many things I don't know in the fossil domain. The most difficult task is to trace the object, it's not the finishing [that is difficult]. The objects we treat have to be worked on delicately in a way that it appears it wasn't modified or changed.'
> <Ishou, 9 February 2013, Rissani>

Ishou's description of his apprenticeship is an example of how learning in practice takes place and what it means to move toward 'full participation' in a community of practice. Learning experiences may vary depending on whom one works with, for some masters are not working consistently and therefore do not provide an adequate learning environment. Also, we cannot make a general claim that all apprenticeship facilitates learning, for there are several ways in which the patrons prevent learning rather than facilitating, such as not allowing the apprentices to freely use the machines when they are absent.

In the fossil domain, apprenticeship and learning is quite informal in character, as many apprentices learn the skills in their own brothers' or kin groups' *ateliers*. Ishou started his venture with his fellow village men, then learnt the most important tasks with a patron originally from Ighef n Ighir (Tafraoute region), who was unrelated to his extended family or village. This is one example of the local transition from a domestic type of production to learning a specialised occupation from a specialist master, although to a limited extent. As described by Goody (1989) in her study of West African apprenticeship, it implies that the household production units have shifted from merely integrating their own brothers and kin groups, via integrating non-kin, to production separated from the household. In the town context, the learners can be total newcomers as they participate in an unfamiliar culture of production, different from the culture of household labour. As Ishou said, his wish to learn the new skills did not allow him to stay in the household or extended family, since it was important to work for a master who could provide him with specialised skills. Furthermore, in the 1990s the fossil domain had a demand for additional labour which met the need of the Ayt Khebbash men who had a desire to learn. In other words, fossil apprenticeship developed in Rissani as a mechanism for dealing with increased urbanisation and the

demand for capitalist wage labour, which implied market diversification and of the division of labour.

Although there is a difference between those who learn within the family unit and those who enter the apprenticeship with unfamiliar patrons, the processes in which Ayt Khebbash men engage in different communities of practice and construct identities through learning are what they have in common. Moha, who learnt the skills with his brother, entered the domain as a way of life by observing his brother working when he was still a student. After he completed his primary school education, he followed the footsteps of his brothers. He started to treat some stones with sand paper and water, and then moved on to polish them with 'disk 36'. He told me that he learnt much from his errors while in the stage of apprenticeship:

> 'An error that I committed and that I cannot forget, was when I was seriously injured. One day I treated 1600 pieces of goniatite, which is not easy for only one apprentice. We were working in Moqaouama, I worked and a man came and gazed at me and then, posed me a question: "Did you do all this alone?" I replied him "Yes", and then at the moment I was trying to prepare what we call "the spoon" which serves to work as a paste, the moment when I put my hand towards the machine it touched me and severely cut my hand and arm…since then, when I want to use a machine I put on my [protective] clothes and turban and everything.'
> <Moha, 9 February 2013, Rissani>

Here, when he talked about 'a man gazing at him' and later he cut his hand, he refers to the evil eye that caught and cursed him. As commonly known, the eye motif is often represented in Amazigh arts, either realistically or abstractly, for the motif is believed to possess magical properties against evil. Although the number of *fqih*-s who write talismans in the *suq* has dramatically decreased in the past years, the historically grounded narratives of dreams, magic and supernatural beliefs are still a powerful undercurrent in the contemporary social relations of Rissani inhabitants. Ayt Khebbash men do not actively practice magic, but as the narrative of Moha shows, in the course of difficulties and contradictions in everyday life they resort to the belief in supernatural forces as a mean of overcoming their problems and to make sense of this experience in the modern context. In other words, the use of historically formulated narratives is a way to establish and maintain identities when the new-comers are caught in dilemmas, while participating and engaging in the existing practices

within the community.

As Lave and Wenger argue, the production and social reproduction of persons are mutually entailed in the reproduction of social order; the inherent contradictions in reproducing persons within the domestic group and in other communities of practice do not go away when the form of production changes, but go through transformations of their own (1991: 114-115). The contradictions in the learning environment should be seen against the backdrop of social transformations and of the historical understanding of local forms of learning, family relations and education. The learning experience of Moha is one example of the reconstructed meaning of the present with reference to the past, when in conflict with the modernising work environment.

In fossil sculpting, one of the most difficult tasks to accomplish is said to be clearing of the 'eye' of the ammonite, the central part of the coiled object which looks like an eye. When a *mʕallem* wants to measure the skill of an apprentice, he will give him an ammonite to see how he works on it. If they are not experienced there is a risk of making a hole in the basin or plate, when they want to paste the ammonite in a basin or in a plate. The proper skill is learnt during work with certain hints but not through direct conversations. Usually, the ways in which the apprentices learn is by being corrected in their mistakes:

> 'There are a lot of things that I didn't do well, such as the ammonite. It's difficult, we all work on it but in the end the *mʕallem* corrects almost all of the work done. I recall that my patron ordered us to wash the stones, and when we went away and finished the task in haste, [actually] we didn't work in a way we should have. We polished the pieces before we put some oil [on them], so that the stones looked as if they were well polished…later we had to re-do the work all over again.'
> <Moha, 9 February 2013, Rissani>

The central task of the artisans is to create objects which look 'natural', as if they have not been modified, which is a benchmark of the accomplishment and a standard for measuring skills. The polished ammonites should look as natural as possible, and the decorative plates of orthoceras are supposed to be an impeccable object, preserved in its original form since the Devonian epoch. Abdelhak, a *mʕallem* who worked in trilobite sculpting for twenty years, prides himself of being one of the best sculptors in the region. His main argument for this, is that he can preserve or recreate even 200 or 300

original thorns of the creature without a trace of modification. He got into the domain in 1984, and first worked in extraction with a friend called Brahim and his brother Hmad. In the beginning they didn't even know the veins, and it just happened that they would find some pieces of stone containing trilobites, and bring them to Rissani. Since they sold well, they continued with the business. Abdelhak bought a thick chisel and tried to sculpt with it, but it didn't work well, because the tool was rudimentary and they didn't have glues to paste with. 'It is just recently that this [situation] improved', he says. 'Some people went to the US and brought back advanced materials and things started to improve'. His associate Hmad was a construction worker before and Abdelhak himself worked in agriculture in Alnif, but they decided to quit after discovering the commercial potential of fossils:

> 'I was working in agriculture, growing tomatoes, wheat and henna. But I already visited the place [in the mountains] with a friend and saw it [the fossils], I just didn't start working immediately. We worked just during the hot season [summer], and when we extracted a large piece we earned like 600 DH … so I proposed him to go and work there. The next day I returned home and bought the necessary equipment and we climbed the mountain, then we started to earn. We stayed in the mountains for a week, then returned home for a week, it continued like this.' <Abdelhak, 23 May 2013, Erfoud>

Later on, Abdelhak's friend Hmad went to the US and bought the tools and necessary materials for sculpting, and he proposed Abdelhak to work with him. He observed how others worked and gradually acquired the skill, but he knew that he was better than others and was quick to learn. When he taught the apprentices, he usually gave them easy tasks, such as the trilobites without thorns and legs, but was always willing to let them use the '*chicago*' from the beginning. He continues to work for the brothers, whom he calls 'just like family', earning a salary and occasionally selling his pieces independently. He says there is not much difficulty in the work, except that he feels 'tormented' by the dust.

In Abdelhak's case, it is also clear that the initiation to the fossil domain and acquisition of skills are unrelated to kin groups or family. He has fostered a strong sense of identity as a *mʕallem* in the fossil domain, and everyday work is a creative and meaningful experience in his quest to achieve a high standard of perfection. However, this does not mean that he is not interested in the other job opportunities and business

chances. He said it is just that he feels he cannot do better at his age. This humility partially derives from the fact that the fossil artisans are not socially respected, even though they have a specialised skill. Abdelhak does not wish his children to 'inherit' his work, since the work condition is too hard with little profit or respect in return. In short, his identity as a 'skilled artisan' is largely validated by the commercial profit in return to his work, and not by the value promoted by the Moroccan government which defined the fossil craftwork as 'national heritage'.

The three cases we have seen, Moha, Ishou and Abdelhak are all skilled and rather successful *mʕallem*-s but not all the apprentices achieve that level. Zaid, an Ayt Khebbash man from Qaṣbah Sidi Hmad Madani, had just turned thirty and lived in Moqaouama Quarter with his two brothers. His case is rather different from the other artisans, because he is unable to work with tools due to epileptic fits. When in Qaṣbah, he used to raise sheep and goats, and before that he was a herder. One day he had lost his conscience and was discovered by his uncle near the village Megta Sfa. This sudden loss of conscience happened to him regularly, day and night, and so he started to take medicine. After he came to Rissani with his brothers he helped them by washing and polishing the pieces with sand paper. He never worked with tools and machines, for the fear of fainting while working. He also works for others, but all are temporary jobs. In the morning he goes around the fossil *ateliers* to see if there is work. If he finds some, he starts washing until noon or sometimes until the end of the day. Zaid typically earns 20 DH per day for this task, but occasionally nothing. When there is no work at all he pushes the trolley in and around the *suq* to earn extra money. He does not have the opportunity to acquire the skills to become a fossil *mʕallem*, except for earning occasional cash through the monotonous task of washing. Zaid is, and has always been, working in the fossil domain since leaving his village, but his participation remains at a peripheral level.

However, being handicapped does not always prevent the artisans from becoming a *mʕallem* in the domain. Here is an example of Yidir (33), who was born in Tafraoute in 1979 and has been living in Rissani since 2000. Yidir first learnt the know-how from his brother, who was working in extraction back in the village since the early 1990s. Yidir started working with him in 1998, and abandoned his agricultural activities because of the drought. He got married to a woman from the same village and the same clan (Ayt Taghla). By that time he was suffering from tetanus in his right leg, and had to rely on a crook to walk. When they first came to Rissani they rented a house in the Bouhamid

Quarter, and he sculpted the trilobites for other *ateliers*. Later on his brother moved on to work in the barite mines, and Yidir found a job in the *atelier* owned by a fellow kinsman from Tafraoute, where he worked for 5 DH per finished piece. The use of the *ziyar* eased the difficulty when sculpting, for he didn't have to use his legs to fix the object in place. However, the infection got worse and in 2001 he got hospitalised in Ar-Rachidia. The operation was unsuccessful, and finally he had to make the decision to amputate his right leg down from the thigh. He collected funds from family and friends, and spent 10,000 DH for another operation in 2006. He says he felt much better after the amputation of the infected leg, and seemed to manage working and moving around with ease. He even became the person in charge of the small *atelier*, and thinks that his handicapped leg does not disturb his competence in work.

In the course of apprenticeship, the Ayt Khebbash men come to identify and understand themselves as fossil artisans and members of a new community, through 'legitimate peripheral participation' and through reinterpreting the past in the changing situation of the present. We have seen apprenticeship here in conjunction with the development of the capitalist labour market in Rissani. In all cases presented, learning occurred without formally organised apprenticeship or teaching, but through participation in different tasks of daily practice.

4.4.3 Acquisition and Transmission of Skills

In principle, the skill of fossil sculpting is something to acquire through observation while working with a senior artisan. The transmission of skills does not usually involve much difficulty, as reported in other cases of apprenticeship. The fossil artisans are usually not reluctant to show the necessary skills to the apprentices, either family members or not. It appears that the Ayt Khebbash men identify themselves with the Tamazight-speaking group in the town, for the fossil apprenticeship always takes place in a Tamazight-speaking environment, as opposed to the predominantly Arabic-speaking town environment. The system of mutual help is established through either personal endeavour or through family networks, and for this reason the fossil *mʕallem*-s are, in most cases, willing to instruct the apprentices to become competent sculptors. In a very rare case, there are Arabic-speaking apprentices, but they quickly become 'Berberised' and manage to understand and speak Tamazight in the course of their learning, whereas the other Arabs who co-habit with Imazighen in Rissani would never learn to speak their language however long they live next door.

Furthermore, as we have seen in the cases of Ishou, Abdelhak and to some extent Yidir, the acquisition of skills is not solely dependent on family relationships, but also on their personal efforts in building social relations of their own. So in their cases, their participation in the community of practice of fossil artisans was realised through social interactions of each of the participants. If we look at the transmission of skills, we can see the differences between the examples. In the case of Zaid, the transmission of skills never occurred due to his physical limitations. He is employed on a day-to-day basis without transmission of skills, but rather lives in a solitary and atomised world, while playing the role of a 'fossil artisan' in order to belong to the community that provides him support. Ishou, Abdelhak, Moha, and Yidir have reached the level of *mʕallem* and therefore are often responsible for the daily tasks in the *ateliers*. Ishou bought his own *atelier* and now works with his brother, whereas Abdelhak and Yidir work for their patrons. Moha has a large shop and *atelier* on the bus route, and employs twenty artisans. Ishou and Yidir do not have apprentices. But in large *ateliers* such as those of Abdelhak's and Moha's, they sometimes need to show the newcomers how to perform the tasks. In order to work efficiently, they recruit someone who is experienced, by giving them a test, and do not always prefer members of their family or kin group. The transmission of skill is done smoothly and the information on how to improve in performing difficult tasks is generously given.

As I discussed in chapter one, the development of identity is crucial to the apprentices of fossil sculpting, which is also fundamental to the concept of 'legitimate peripheral participation', since learning is not merely a matter of the transmission of knowledge or the acquisition of skill, but is about the identification processes in relation with practice. As Lave and Wenger argue, learning and a sense of identity are inseparable, for they are aspects of the same phenomenon (1991: 115-117). The Ayt Khebbash men reconstruct their social identities through 'legitimate peripheral participation' at work, by transforming themselves from subsistence farmers/herders to artisans whose labour is incorporated in the global market economy. One of the important components of their new identification processes is, as already mentioned in section 4.4.2, the reconstruction of the home village in the town. The Ayt Khebbash artisans work together in a linguistically Tamazight-dominated world as opposed to the generally Arabic-dominated Rissani environment, creating a network of social relationships which is based upon kin groups and families, but is also extended to other Tamazight-speaking groups of artisans and apprentices. Also, their sense of solidarity is strengthened by their willingness to help each other in their learning process. The

ways in which they 'traditionalise' the modern work environment into something familiar to them, suggests that the Ayt Khebbash men are actively reconstructing their social identities by making use of their own versions of histories. At the same time, the different ways in which the skilful apprentices and those with limited capacities establish and maintain identities generate diverse viewpoints on the practice and its development.

Lave and Wenger claimed that the apprentices' 'legitimate peripherality' crucially involves participation as a way or learning, 'of both absorbing and being absorbed in the culture of practice' (1991: 95). Although this model provides insight into the informal learning processes of the Ayt Khebbash artisans of Rissani, it is also questionable to define their belonging to the 'culture of practice', by assuming the members to be the autonomous Western individuals who 'negotiate meanings' to achieve a common goal. Wenger claims that the individuals 'negotiate meanings' in the dynamic process of identifications, a phenomenon that becomes especially significant at the periphery of the community (1998: 207). He does take into consideration the articulation of the communities with other communities, yet he ignores the 'multiplicious' aspects of identification processes which are influenced and limited by external power relations beyond the official structure of the communities, and by the historically situated self. As I shall elaborate later in chapter five, the participation in the communities of practice also involves disengagement, 'non-participation' and refusal to establish identities connected with the practice.

4.5 The Quest for a New 'Tradition': The Commercial Side of the Fossil Domain

The Ayt Khebbash men are not solely making a living by building the social relationships created within the communities of practice of fossil sculpting. There is an arduous human endeavour in an attempt to improve, secure and defend their lives in the town in order to survive. Due to the world recession since the Gulf War in 1991, and especially after the economic crisis in Europe since 2008, the life of Ayt Khebbash artisans has become more and more unstable, except for those who successfully ventured into other domains such as barite mining or tourism. In order to understand the identification processes of fossil artisans in the community of practice from a comparative point of view, it is vital to look at the communities of practice other than that of apprenticeship with which they engage in their daily lives. For this aim, let us now examine the ways in which the fossil sculpting and its commercialisation was affected by the world economic crisis and the state policies, and how the artisans responded in

a continuous endeavour to create new 'traditions'.

4.5.1 The Art of Payment Delay

Following the European recession since the early 1990s, the demand for artisanal products and the price of fossil craftwork started to decrease progressively. The inflow of nomadic populations into Rissani and the number of fossil artisans were still on the rise, but certain fossil merchants realised the stagnation of the commerce. The foreign buyers started to decrease their orders, and the Moroccan intermediaries delayed their payments to the artisans. Those merchants who used to sell out their fossil craftwork in a month-long exposition in the US complained that nowadays they had to remain there for six months without significant profit.

It is fairly common in the domain that buyers are incapable of immediately paying the full price of products, and the cash flow stagnates due to double and triple credits they owe to each other. Bourdieu observed in Algeria in the 1960s that the peasants who became urban proletariat lacked the skill in handling money; they were incapable to adjust to legal rules and lost their land, since they did not understand notions such as credit and interest (1963: 9-13). This analysis does not fully apply to the case of Ayt Khebbash people working in towns and cities since the 1960s, because they had already worked in French-run lead mines and were accustomed to the economic institutions and monetary exchange introduced by the colonial government. However, they use localised notions of 'credit' and do not calculate the financial value of time since the notion of interest is absent. According to Islamic norms the fossil merchants do not charge interests to each other, and when they give 'credit' it is never defined by a written contract. Instead, the local notion of 'credit' indicates payment delay for an unlimited period of time, which often functions as a system of mutual help for the economically deprived.

For example, two fossil artisans, Nasser and Hussein, associated with one other for the commerce of meteorites. Nasser represented their venture and sold a box of meteorites to Amar for the price of 2000 DH. Amar agreed to the price but said that he could not pay the entire amount at once, and asked for a credit of 800 DH. So Nasser received 1200 DH only, but did not tell his associate Hussein that he received the money, instead he said he was still waiting for the payment. So for the moment Nasser would pay Hussein from his own pocket and gave him 200 DH. After some time Hussein realised something was wrong, and headed to Nasser's shop. It turned out that Nasser was

owing money to Hussein, and Amar was owing to both Nasser and Hussein:

Hussein: 'I haven't received anything. How much for me?'
Nasser: 'The remaining amount for him [the buyer Amar] is 800.[38]'
Hussein: 'No, how much of the entire value for me? It's not just 800 that are remaining.'
Nasser: 'It's 800 for him to pay us.'
Hussein: 'How much in total for us?'
Nasser: 'That, I already gave you.'
Hussein: 'No, how much is it for the whole business?'
Nasser: 'Who remembers?'
Hussein: 'It's 2000 DH and something, yes? And I receive only 800? It's only my money that went out, or what?'
Nasser: 'What 800? We already settled the account. It remains 800.'
Hussein: 'No, we didn't settle!'
Nasser: 'We did it.'
Hussein: 'Where?'
Nasser: 'When I told you what is remaining here for this [box of meteorites].'
Hussein: 'No, you did not tell me anything. You said he [Amar] didn't give you anything! ….you said "I give you 200 DH, because he didn't give me [the money]".'
Nasser: 'May the prayers be on the Prophet [*salaat ala nabbi*, meaning that's it, expression of consent].'
Amar: 'I don't know what happened amongst both of you …'
Hussein: What did you take? You believe it was sold for 800 DH or what!? We bought it for 1,000 plus.
Nasser: '[To Amar] How much did I sell you that?'
Amar: 'I don't know what you did!'
Nasser: 'We bought that for 1100 DH.'
Hussein: 'We bought it for 1000 plus, I gave you 600 or 650.'
Nasser: 'Its 1100. You paid 600 and I paid 600 [sic].'
Hussein: 'I cannot bring myself to recuperate my money, look at the benefits! You are playing games [*hat laʕb aynnagh*]!'
Amar: 'Ok, listen…take your 800 dh…that is in between you both…the one to blame is this one [Nasser].'

38 In rural Morocco, people still use the old currency calculation of Riyal, so in the original phrase, he said 16,000 Riyals. To avoid confusion, I converted Riyals to Dirhams.

Hussein: 'He has to give me 600 or 800 in addition.'
Amar: 'I, I lost in this affair. But never mind …'
Nasser: 'How much you gave me last time?'
Hussein: 'I gave you 600.'
Nasser: 'Give him [to Amar], May God return me that 200 [that he gave to Hussein previously] [*kas xlifa aala llah, la …*]
Hussein: 'No, it's not that!'
Amar: 'You have to be fair with the account, don't mix it up.'
Hussein: 'You see, Amar …'
Nasser: 'The rest is 800, I told you that. I gave you 200 from my pocket.'
Hussein: 'You gave me that. I don't lie. You said, "I give you from my pocket."'
Nasser: 'This one [Amar] owes 800 [to Hussein].'
Hussein: 'You did not talk to me about 800, you told me he gave you nothing … that he hasn't yet paid us …'
Amar: 'I don't want to give you that [800 dh]! So, give me a discount!'
<13 September 2012, Rissani>

The conversation ends in a light-hearted tone while the buyer Amar jokes with the sellers that they should reduce the price for him. Although the parties are frustrated by the situation, they are still friends and have no desire to pursue the case too seriously. This art of payment delay is a long-established practice in Morocco which is not exclusive to the fossil business. In order to deal with a stagnant economy, they created ways to slow down the money flow by giving credit to each other, justifying it by quoting Islamic morals and tolerance. It is a system of mutual aid to allow people who don't have the means to find their way when in a difficult situation. Occasionally it can become exploitative, such as when the party who receives the money does not give the required sum to the recipient, as in the case of Nasser. As the general economic situation has become progressively difficult, in some cases this delayed payment causes frustration and anger, leading to serious disputes with physical violence or verbally threatening to call the police if the party does not pay. If one does not have money to pay, people have to look for relatives or friends to ask for another credit, ending up in double or triple debts. In a more prosperous domain the use of credit is far less dominant – the above conversation just indicates the decline of the fossil business and the practice of artisans to mitigate their problems.

4.5.2 Cooperative Activities and State Policy

In order to structure the domain and to promote national and international sales, the Cooperative Sijilmassa for fossil crafts was founded in 2000, followed by the Association Ayt Aṭṭa for fossil and marble sculptures in 2004. The artisans could benefit from working in the framework of cooperatives to ease tax payments and the selling of their products in larger quantities abroad. Until then the profit generated by the fossil sector was nearly dominated by the family-owned local companies, working systematically with travel agencies who brought large organised tour groups to their shops conveniently located on the bus route.

The cooperative aims to provide the members with subsidised materials and tools essential for fossil sculpting, and help them to sell their products abroad and inside Morocco. Its function is similar to a company, in the sense that it does the accounting and pays the taxes for the artisans who work informally. The Association was founded in order to organise the fossil domain, improve the quality of the products and promote commercialisation related to tourism. It has organised some fossil expositions in Ar-Rachidia, Tinerhir and Merzouga Route since 2005, but their activities have been significantly reduced since more and more artisans started to leave the domain.

Since 2005, the national policies also encouraged the craft production to a limited extent. The Craft and Social Economy Department (Le Department de l'Artisanat et de l'Economie Sociale) launched the 'Vision 2015' to promote the artisanal activities to generate incomes for the artisans by sustainable development. In this vision the fossil craft was defined as representing the 'paleontological heritage' or 'prehistoric heritage' of the Ar-Rachidia Province region – a valuable domain of work to be preserved. Apart from the various claims to promotion and quality control, the only project which was implemented in the fossil domain was the education programme which aimed to provide two years of formal apprenticeship to young people who did not continue their education after primary school. The project aimed to educate 50,000 people within the period from 2006 to 2015, concerning all the artisanal sectors, and to introduce a system of formal certificates to measure their level of mastery. In reality, however, there are very few people entering the fossil domain each year. In 2013, there were no candidates from Rissani wishing to enrol in this state apprenticeship programme.

As the demand for barite in the international market started to rise in the 2000s, increasing numbers of fossil artisans started to move into the mining sector, either

temporarily or permanently. As I mentioned earlier, there were several artisans who already had some experience working in mines of lead, zinc and barite, so for some it was a return to their previous work. Here we see that although the fossil artisans are seemingly incorporated into the larger value hierarchies, they do not necessarily identify themselves with the idea of national heritage as a basis for their prestige, but rather with their own income generating capacities: fossilised stones and craftworks are only valuable to them as long as they possess high commercial value.

For example, the commercially successful artisans[39] buy a large quantity of small souvenir objects such as miniature marble camels and animals from Marrakech and Agadir, and sell them as regionally produced crafts to the guides and tourists, together with fossil ashtrays, small jewellery boxes, etc., because they have become the most popular commodities in the mass tourist market,[40] especially in the wake of the European recession. The tourists passing by Rissani to visit the sand dunes of Merzouga are usually not interested in the authenticity of the objects but looking for a memento of their trip to the exotic place, or small souvenirs to give to their friends at home. For this reason, some fossil merchants do not stock up on much of the real trilobites, ammonites or goniatites any longer but specialise in these desired objects. Hence, the pressure to sell small inexpensive souvenirs exerted by the market forces is affecting the quality of the craft production that the state gave the status of paleontological and prehistoric heritage to. And paradoxically, the artisanal objects which have commercial value in the tourist industry become a national heritage to the central state, a point of view confirmed by the director of Artisanal Delegation in Ar-Rachidia.

In the current situation, the fossil domain is progressively abandoned by the artisans whilst the central state is ostensibly eager to promote commercialisation in relation to tourism, elevating the fossilised stones status to precious paleontological and prehistoric heritage. However, if the concept of heritage or tradition itself is a distinctively modernist concept and a Eurocentric idea, it is questionable to what extent the local artisans are aware of their own incorporation into this political context. In the initial period of the 1980s, the fossil sales to tourists enabled the Amazigh population to find refuge in the town, build their houses and improve their standard of living.

39 As noted earlier, fossil craftwork is a family business in Rissani. This means the artisans who engage in craftwork usually work with their brothers who deal with the marketing and selling of the crafts.

40 On the subject of the invention of traditional crafts for the tourist market, see Biernert 1998; Cauvin Verner 2007.

Simultaneously, as Nash (1993) argues for Central America, this process involved a renewed colonisation as the local artisans became ever more dependent on international markets and the haphazard economic cycles over which they have no control - the Amazigh nomads have become fossil artisans as a result of the commercialisation of fossil crafts, and will leave the domain when the market demands other minerals. Whether the fossil artisans will continue to create and conceive of their new 'traditions', will depend on the global market forces which are not always synonymous to the promotion of national identity.

4.6 Social Identities in the Claim for Property Rights

Now that we have observed the social practice of Ayt Khebbash artisans in their everyday work, let us look at another community of practice they engage in, which is also an important component in their new identification process in the town context. In 2012, the Ayt Khebbash people's strong attachment to tribal and ethnic identities was demonstrated in their tribal claim of ownership to the twenty hectares' of land around the settlement Kudyet Draoua[41] to the east of Erfoud. Their actions defied the state incentive that de-tribalisation is a necessary step in the move towards urbanisation and modernisation. The Kudyet Draoua area is one of the 'illegal' settlements where a number of nomadic Ayt Khebbash population took refuge during and after the period of drought in the 1980s, and many of its inhabitants work in the domain of fossil sculpting.

On 10 April 2012, more than 5000 Ayt Khebbash tribal members from Rissani, Erfoud and Merzouga region gathered at the disputed site of Kudyet Draoua – the territory commonly known as 'Shishan'[42] - in protest against the sale deals of land between the Erfoud Municipality and the Arab Sbbah[43] (also known as 'Maadid') tribal representative.[44] The protesters alleged that the *jamʿa sulaliya* (tribal unit, ethnic descent group-

41 Kudyet Draoua means 'the hill of the people from the Drâa' in Arabic.

42 The land is commonly called 'Shishan' by the local people, referring to Chenchenya (the Chechen Republic of Russia). The term is often used to address 'illegal' settlements in various parts of Morocco, indicating their 'defiance' against the central state.

43 Arab Sbbah is a sedentary Arabic-speaking population who occupied several *qṣur* in the lower Ziz Valley.

44 Most of the data concerning the Kudyet Draoua land dispute presented in this section come from my informal and formal interviews with the local people, i.e. the President and qayd of Rissani Rural Commune, Vice-President and staff of Erfoud Municipality, Ayt Khebbash tribal representatives, leaders of the

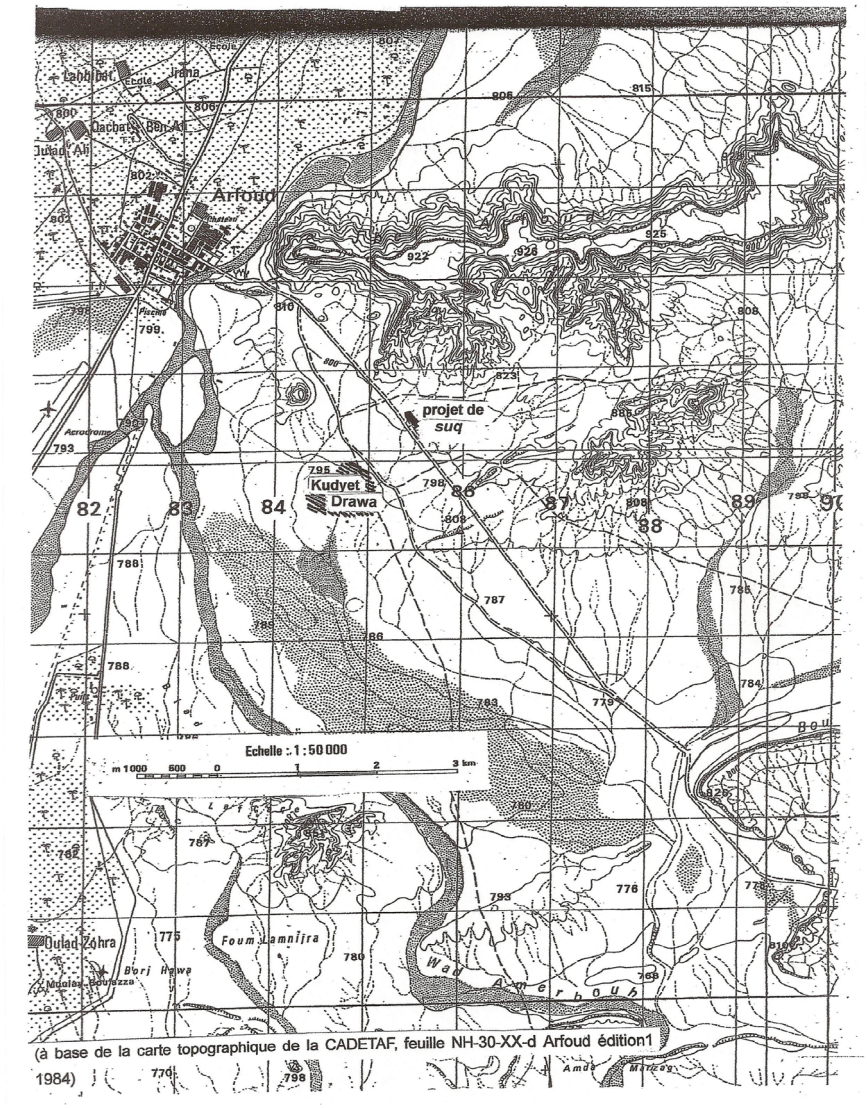
ing) of Arab Sbbah had sold twenty hectares of land located in the area of Kudyet Draoua to the Erfoud Municipality, without the documents to justify their ownership to the land in question (map 4-2). The sale act itself took place some eight years ago, dating back to 2004, but it became known to the general public only in 2009, and had gradually led to various investigations, protests and disputes in the past three years. About 2000 Ayt Khebbash members signed a petition to distribute the land to all the families in the region belonging to the Ayt Khebbash tribe. The Erfoud Municipality claimed in response that there was no topographical map in existence to justify the Ayt Khebbash tribal ownership, and that their protest had no legal grounding.

Before the French Protectorate period, the tribes organised and regulated the territorial boundaries and use rights according to their customary law (*azerf*), and the tribes and *qṣar*-dwelling population of the region have agreed that this particular plot of land is the tribal territory of the Ayt Khebbash. However, since the French occupation of Morocco, the *ḍahir* of 1919 legally defined the tribal land as 'collective land', which meant that the land was transformed from a holistic environment for living into a commodity that can be sold in the marketplace. In other words, the colonial legislation initiated the separation between the tribe and their territories, which meant a progressive demise of tribal influence over the newly implemented legal order.

After the independence in 1956, the collective land continued to be considered as obstacle for development, and the property rights of the tribes were even more diminished in an effort to promote investment and commercial activities (Bouderbala 2007). The new legal system of independent Morocco was largely based upon a French legal model, which also corresponded to the expansion of the world capitalist economy promoted by colonialism. The transformation of a legal notion from collective use rights to individual property rights is linked to a transformation of the economy from subsistence to the capitalist mode of production, while colonialist modernity dismissed the social organisation based upon agnatic ties and the notion of tribalism, in favour of individuals defined by property rights.

However, the dispute over the property rights in Kudyet Draoua between the Ayt Khebbash and the Arab Sbbah tribal units clearly demonstrated that tribes as political units still exercise significant power over the control of local resources in the Tafila-

land dispute, inhabitants of Kudyet Draoua and several Rissani fossil and barite artisans.



Map 4-2 Kudyet Draoua and the municipal *suq* project

let. Simultaneously, it revealed that either the tribal identity or the broader sense of Amazigh consciousness are never static, since contextual factors continue to influence the formation and re-formation of personal and collective identities. The social practices which we see as 'tribal' or 'traditional' are in a constant process of invention

and development, such as the ways in which different groups express their claims to the land. People do not primarily define their property rights in a legal way but in a social way, which is intricately connected to their tribal and ethnic identities, but also influenced by the modern notion of individualism, as we shall see in the Ayt Khebbash people's petition for allocation of land rights based on household units. Therefore, the question to ask is how different groups defend their positions and how their shifting tribal identities relate to their work practice in the modernising and globalising context of today.

For this purpose, I shall first look at the progression of one particular land dispute in Kudyet Draoua. Then, I will examine the local understandings of collective rights and the modern legal system inherited from the colonial past, and how people construct legal categories such as tribal and individual property rights in the process of their reformulation of social identities. Lastly, I will discuss the ways in which property rights are related to ethnic and tribal forms of social organisation in rural Morocco, and its relevance to Ayt Khebbash people's work practice.

4.6.1 The 'Shishan' Land Dispute

A month after the 10 April incident, on 16 May 2012, the Kudyet Draoua inhabitants – the Ayt Khebbash members who already resided there - demonstrated in front of the Erfoud Municipality, demanding their rights to water and electricity. The settlement, in the form of a village, is located on the south of the twenty hectares of territory allegedly sold to the Municipality, just across the unpaved road, which is already inhabited by approximately 3000 immigrants consisting of four hundred households, mostly from the Ayt Khebbash group (map 4-2). A first wave of settlement to this area began in the 1990s, for in this period certain members of the Rissani Rural Commune encouraged their immigration for electoral reasons. The second influx of nomadic population was in the 2000s, with the increased need for wage labour and urban housing. The current population of Kudyet Draoua mainly consists of Ayt Taghla, Ayt Amar, Irjdaln from the Tafraoute and Taouz areas, and Ayt Bourk from Zerzef and Missour areas, with notable exceptions of Dwimniaa families who settled there in the 1960s (table 4-1 and map 2-4).

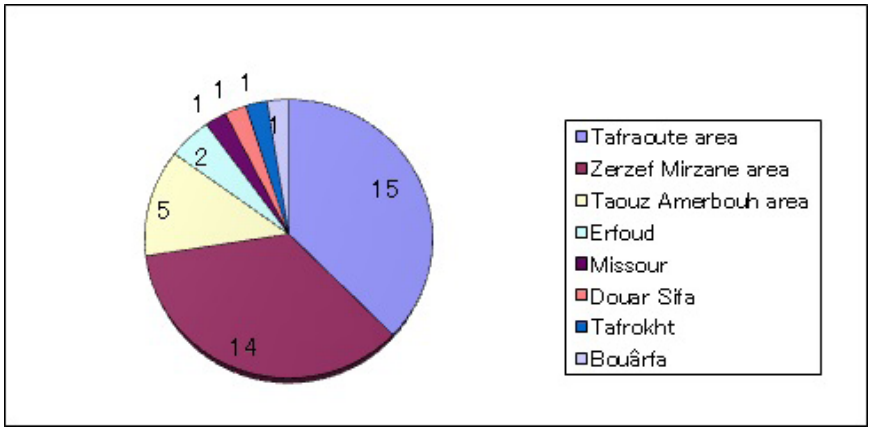


Table 4-1 Areas of origin of Kudyet Draoua inhabitants

40 sample households (out of approximately 400) taken on 10 October 2012.

However, the problem was that the *ḍahir* of 1919 prohibited the individual transfer of collective land, which meant that only the 'public moral person' could cede the land if it was for the benefit of the central state and served the local welfare. Since the administrative decision-making power of the collective land belonged to the Moroccan state, the *jamʕa sulaliya* of Ayt Khebbash could not distribute the land to individual tribal members and thus the tribal members' act of settling in was considered 'illegal'.

As a result, not a single household has the right to plug in electricity, nor to incorporate tap water in their houses. The inhabitants buy batteries in Erfoud for electricity, and go to fetch water early in the morning from the only one communal tap in the village centre. The settlement is close to Erfoud, but the inhabitants used to obtain their birth certificate or other necessary documents in Rissani, for the territory was attached to the Rissani Rural Commune until 2009 (maps 2-4 and 4-2). It is estimated that the number of Ayt Khebbash immigrants in Kudyet Draoua started to increase in the 1990s, and some commune members - such as the former members of parliament, and the former president of the Rissani Rural Commune - had encouraged and helped them to settle there for electoral reasons. On 17 January 2008, two associations in Kudyet Draoua wrote a letter to a member of parliament and President of the Erfoud Municipality, to request their administrative attachment to Erfoud, for the reason of geographical proximity. The member of parliament addressed a request to the governor to include Kudyet Draoua in the Erfoud urban commune territory. Since then, the

Rissani Rural Commune lost their power base and demanded Erfoud to return the water and electricity cost they had paid for Kudyet Draoua. Previously the Rissani Rural Commune had paid three periods, so Erfoud paid the rest of the two periods instead of returning the money. In 2009, Kudyet Draoua was officially attached to the Erfoud Municipality, but until present, the authority has not allowed the inhabitants access to electricity poles. The Municipality wants the *jamʕa sulaliya* of the Ayt Khebbash to completely hand over the territory in order to construct a *suq* there and for this purpose they need to destroy all the houses in existence. As a result, the inhabitants of Kudyet Draoua started to insist that they wish to return to the administrative territory of the Rissani Rural Commune.

This conflict of interests between Erfoud Municipality - largely represented by Arab Sbbah - and the *jamʕa sulaliya* of the Ayt Khebbash, manifested itself in repeated physical clashes over the past decade. In 2001, alarmed by the expansion of 'illegal' settlement, the Caidat[45] Arab Sbbah started to destroy houses by sending several tractors to the site. A young fossil artisan of Kudyet Draoua recalled the incident as follows:

> The Arab Sbbah believed that the land belonged to them…and demanded us to leave. They destroyed several houses…and they came to my house. It was my mother who could stop them, when she plunged herself underneath the tire of tractor. Then [at that point] they finally stopped there….
> <Khalid, 22 May 2012, Kudyet Draoua>

After the incident, the Ayt Khebbash tribal representative officially confirmed that the territory east to the Ziz River belonged to Ayt Khebbash tribal land, but the statement did not change the legal status of the inhabitants, which led to the 16 May 2012 protest already mentioned. On the way back from Erfoud, the demonstrators blocked the route to Merzouga to attract attention of the authorities passing there. The police demanded to clear the road, which was followed by violent physical clash with the protesters. Nine people were detained, including three women. One of them, a teenage girl, was brutally attacked by the police and injured on her face and body, which sparked anger among the local population. Her pictures were published on a local news website,[46] as a proof of human rights violation by the state. This led to another

45 Local administrative authority.

46 http://www.ksarsouk.com (in Arabic) 16 May 2012.

protest a week later in front of the provincial government of Ar-Rachidia, demanding the immediate release of the detainees. The response to this demand was delayed, but all women and three men were released later. The other remaining three detainees were sentenced to four years in prison.

4.6.2 Local Views of 'legitimacy'

For centuries the nomadic group of the Ayt Khebbash lived in the area of Rissani, Merzouga and Taouz to the south, Boudnib to the east and Tinerhir to the west (map 2-4). The Arab Sbbah is a sedentary Arabic-speaking population who occupied several *qṣur* in oasis of the lower Ziz Valley. The territory in question, Kudyet Draoua, is situated in the Erfoud region in the direction of Merzouga, along the regional route No.702, which was scarcely populated until the 1990s when a number of Ayt Khebbash people started to settle in. The tribal property before the French occupation was administered by the tribal customary law *azerf*, and its usufructuary right belonged to the Ayt Khebbash tribal unit. In other words, the land was inalienable from the tribe and was cultivated or exploited to the collective benefit of the members.[47]

In the French Protectorate period, however, the demand for land by the post-World War I immigrants from France pressurised the Protectorate to enable them to acquire land in Morocco. In other words, although the policy makers had objectives to preserve the traditional ways of life, they needed a legal grounding to colonise the more fertile land to distribute to European immigrants. Therefore, they defined the pastoral land as 'uncultivated land' (*mawat*, meaning dead), and largely limited the collective tribal land to this area. The 'cultivated land' was decided to be treated as joint property, that should be divided among the households of the tribes or else for private ownership (Vinogradov 1974: 94-95). In most tribal areas in Morocco, people made little distinction between agriculture and pasture land, but the state objective was to confiscate the more fertile land and limit the tribal land to the less fertile areas, while incorporating them under jurisdiction of the state.[48]

47 On the subject of pastoral order in the tribal milieu of rural Morocco, see Mahdi 2010.

48 See Bouderbala, Negib. 2007. 'Terres collectives et territoires de tribu', Akesbi, N, Benatya, D, et al (eds.), *Hommage* à *Paul Pascon : Devenir de la société rurale, développement économique et mobilisation sociale.* Rabat : IAV Hassan II, Département des Sciences Humaines.

Following several *ḍahir*-s issued between 1912 to 1916, the 1919 *ḍahir*[49] limited tribal rights to the collective lands, declaring that the administrative decision making power belongs to the central state. This meant the tribes still had the right to administer, but they no longer had the right to sell, rent or seize the land without approval of the Protectorate government. The content of this 1919 *ḍahir*, in terms of ownership of the collective land, became the root of tribal conflicts over land rights in several parts of rural Morocco, which is yet to be resolved in the post-independence period.

After Moroccan independence, the collective land was administered by the Ministry of Interior which managed the land and inter-tribal disputes. As mentioned earlier, in principle the collective land could not be sold by the tribal representative, but with a notable exception of a 'public moral person', i.e., it could be sold to the commune, municipality or to a ministry who represents the public interest. In the case of Kudyet Draoua, the twenty hectares' territory was allegedly sold by the Arab Sbbah tribal representative to the Erfoud Municipality who has the objective to build a housing district (*arrondissement*) and a covered market (*suq*) there. In opposition to this act, the Ayt Khebbash representative Bassou claimed the sales contract to be invalid:

> *Bassou*: 'We were notified by the *pasha* [of Erfoud] that our land was sold. We claimed that the Arab Sbbah representative should be present in front of us, to explain why they have the right to hand over, rent out or sell these twenty hectares of land…If the Municipality had bought it, probably they dealt with falsified documents, who knows?'
> *Question*: Why is it that the Municipality did not show you the sale documents?
> *Bassou*: 'No, they had shown us, but that was the PV [*procès verbal*] of 2005. In this document they mention these twenty hectares, and it contains all the stamps of the relevant authorities. For example, that of tax, the representative of the *jamʕa sulaliya*, the president of the Municipality and the *pasha* of Erfoud, all of the relevant members of the commission, since if the *jamʕa sulaliya* want to sell the land they need to call all the services of this commission to reunite.'
> *Question*: What is the content of this PV?
> *Bassou*: 'It says the land was sold at the rate of 15,000 DH per hectare.'
> *Question*: With which document the Maadid [Arab Sbbah] had justified their land sales?

49 See *Guide sur les Terres Collectives*. 1990. Royaume du Maroc, Ministère de L'Interieur, Sécretariat Général, Direction des Affaires Rurales.

Bassou: 'Oh, that's what we are all looking for! Myself and the president of our Commune, and the chiefs of the Cercle [*daʔira*] Rissani, we notified the representative of Caidat Arab Sbbah that the land could not be sold like this. Since 2005, one of our representatives, Oualibou, had filed a claim, but the case remained stagnated and now it came back again. There are [in the PV] ten hectares among those twenty hectares belonging to the Ayt Khebbash, do you understand? I was surprised: where is the signature of the representative for these ten hectares? We claimed that he should be present. Normally, he should have been notified, but they say he didn't come because he was sick…We told them he must be present [for the document to be valid].'
<26 April 2012, Rissani>

What we can see from the claim of Bassou and the content of the 2005 PV, in which the signature of Ayt Khebbash representative is lacking, is a certain complicity between the *jamʕa sulaliya* of Arab Sbbah and the Erfoud Municipality. Furthermore, some Ayt Khebbash informants suspect that probably some of their tribal members could have been included in the deal behind their backs, since they believe that prominent members of the *jamʕa sulaliya* of Ayt Khebbash must have allowed the Arab Sbbah to proceed to the sales act:

'The problem of Shishan, is that we [Ayt Khebbash] wanted to redistribute it [the land], we heard a portion was sold by those Arabs [Arab Sbbah], if they sold it we need to know who did this, since if they [Arab Sbbah at the Municipality] have bought it, someone of the Ayt Khebbash must have sold it. People gathered there, they wanted to redistribute the land but they were afraid of the authorities and prison. They have already traced by tractor four parts corresponding to four clans [of Ayt Khebbash]; Irjdaln, Ayt Amar, Ayt Taghla and Ilḥyan.'[50]
<Mahmoud, 26 April 2012, Rissani>

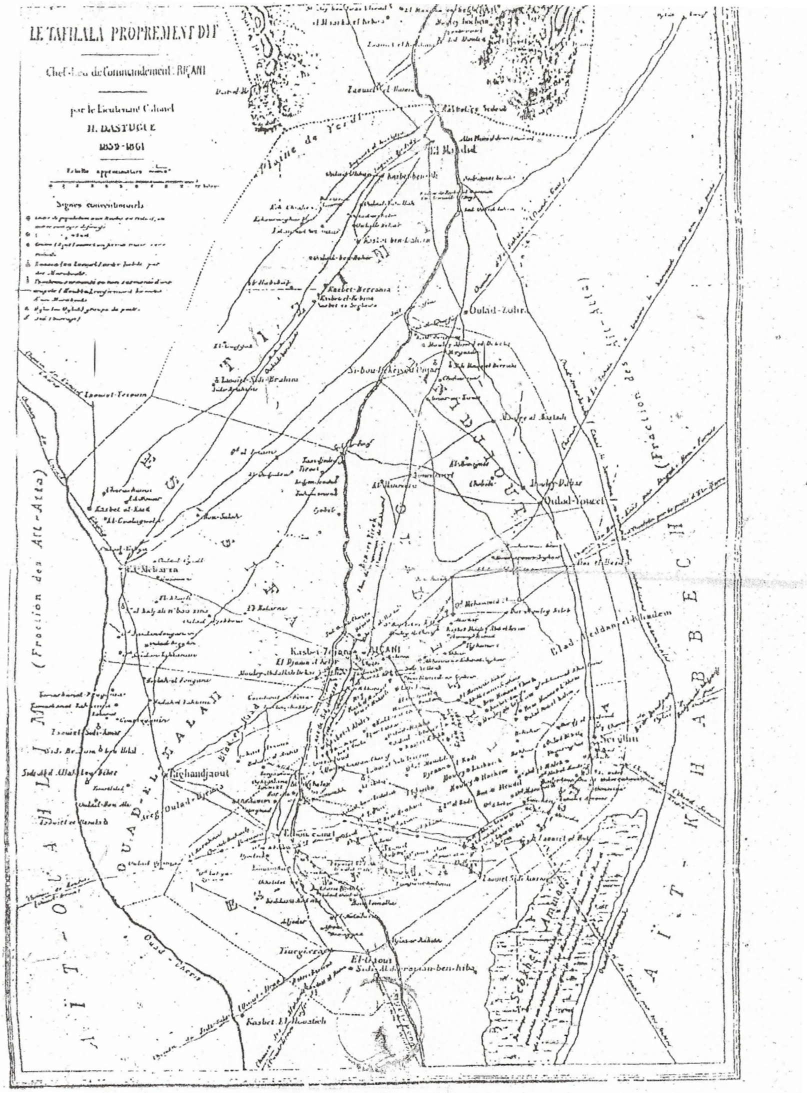
Although it might be true that Ayt Khebbash members might have been included in the negotiations, it is a well-known fact that the Erfoud Municipality is controlled by

50 This attempt of distributing the land according to the clans is based upon the local people's historical practice which is related to the customary court. During the Protectorate period, the court used to register marriages, births, divorces and death, as well as resolving the disputes over land ownership. They divided land according to existing genealogies and established plot boundaries. On the functioning of the customary courts in this period see: Hoffman 2010.

the Arab Sbbah, and that local policy is strongly influenced by the interests of this group. This is because the majority of the elected members of the Municipality, including the president, come from the Arab Sbbah. This fact demonstrates that the tribes in the Tafilalet, depending on contexts, still form political units and control social actions of individuals, which have a significant impact on local political decision making. A member of the Rissani Rural Commune explained the conflict in the following way:

> *Question*: Do you think the Erfoud Municipality has a shortage of land [since they got Kudyet Draoua handed over from Rissani Rural Commune to be included in their territory in 2008]?
> *Samir*: 'Oh, the Municipality did not even have a place where to bury a serpent [*lbaladia ma ʕandha temma fash tedfen ḥetta ḥensh*, meaning they do not have anything], even if the cemetery belongs to us [the Rissani Rural Commune and the Ayt Khebbash]!'
> *Question*: But they want to construct a market there?
> *Samir*: 'Yes, but the problem already existed between the *jamʕa sulaliya* of Ayt Khebbash and that of Arab Sbbah. M and the others [ex-bureau members of the Municipality] have bought from Arab Sbbah in 2004. When this information came out to us, we filed our opposition in 2004 and 2005 … The project of the *suq* itself is not a problem for us, because it is for the public interest. We have already discussed this some years ago, that they wanted to build a *suq*, artisanal centre, fossil *atelier*, etc. But it was since the 1920s that the Ayt Khebbash people have guarded this land … in the middle of the Ziz River the landmark [*borne*] was established in 1937/1938.'
> <14 June 2012, Rissani, interview in Moroccan Arabic>

As discussed by Samir and many other local people, the 'legitimacy' of the Ayt Khebbash tribal claim to land is well recognised locally. Samir attested that 'the Arab Sbbah have got nothing on the east of Oued Ziz', although there are no official documents to legally justify this claim, except for the obscure map of the tribal territories existing at the Rissani Rural Commune, or in the hands of particular people (map 4-3). An elderly Ayt Khabbach man who resided in Kudyet Draoua also claimed that even if the territory was uninhabited, it belongs to Ayt Khebbash because the boundary was established in the middle of the Ziz River before the French colonisation of the region. He showed the document concerning the convention which defined the territorial



Map 4-3 The Tafilalet in the middle of the nineteenth century

limit since 1279/1293 (table 4-2; appendix 2), stressing that the Ayt Khebbash never allowed the Arab Sbbah to cross the boundary. In other words, the 'legitimacy' of tribal ownership rests in the local people's historical memory and in their customary law.

In the context of the Tafilalet region, the French colonial authority has defined the non-cultivated land as belonging to the nomads (people engaged in herding), such as the Ayt Khebbash. On the other hand, the greenery (*verdure*), which referred to the palm groves and cultivated lands, was given to the *qṣar* dwelling population, for in the case of war the greenery always used to be their territorial limit (map 2-4). An Ayt Khebbash man who resides in Rissani explained that during the colonial period, when they asked the *qṣar* inhabitants, 'where is your frontier?' they used to reply 'at the end of the palm groves, we are not going out further from there'. In the meantime, the Ayt Khebbash have taken all of the territories outside the palm groves: the entire east bank of Ziz River crossing into Zerzef region, excluding the territory of Ihadhuchin of Retbat (Aoufouss). He stressed that, if the *filali*-s (in this context, the Arab inhabitants of *qṣur*) transgressed the territory outside of the palm groves, they could be assassinated. In sum, the Ayt Khebbash territory was agreed to be the east of the unpaved route to Boudnib in the north of Erfoud. All the territory to the east belonged to Ayt Khebbash, and the land to the west was considered the territory of Ihadhuchin, Ayt Seghrushen, and the people of Retbat in general.

With this historical process in mind, it is locally justifiable for the Ayt Khebbash people to claim Kudyet Draoua as belonging to them, although the territory was 'empty' – largely uninhabited until the 1990s, with the exception of very few Arabs and Ayt Alwan (an Ayt Aṭṭa clan which is not part of the Ayt Khebbash group) who settled there in the 1980s. It was mainly due to the climate change and the need for wage labour that many Ayt Khebbash families from the Zerzef, Taouz and Tafraoute regions started to move into Kudyet Draoua, attracted by the proximity to the *suq* (Erfoud town centre) and access to water:

> 'At first, we were nomads. When there were no more animals [herding], some of us went towards [the work of] barite mining, the others went to fossil sculpting. Later, it was necessary to use the machines for work [they needed electricity]. We cannot rent a house here [in Erfoud]. We went there [to Shishan] and constructed barracks and we worked in Erfoud, just by renting a garage [for work]. Now, we are looking for electricity, but in vain …'
> <Yassine, 22 May 2012, Kudyet Draoua>

Just like Yassine, many of the Kudyet Draoua inhabitants first worked in fossil sculpting, and the rest engaged in day-to-day construction work. The one-hour walking

distance to Erfoud town centre and the Municipality's plan to build a *suq* there confirmed the potential value of the territory, which implied the land price might go up dramatically in the near future: once a non-descript plot of desert land, 'Shishan' has become the promised land for both the Ayt Khebbash people and the Erfoud Municipality. The conviction that the land belongs to the Ayt Khebbash group led to an increasing number of tribal members randomly moving in without purchasing the land, ending up with an 'illegal status' of their housing and being denied access to electricity and various other amenities.

4.6.3 Becoming an 'Ayt Khebbash Artisan'

After we have analysed the strong local belief in historically defined tribal territories, let us now look into the question of how these tribal identities relate to the collective rights of property. In the modern world, land disputes between indigenous populations and the state or present owner are widely discussed. In the area conquered and colonised by Europe and the US throughout the nineteenth and twentieth centuries, it was a fairly common occurrence that the native people were robbed of or driven out from their lands. Even after winning independence, with the birth of new nation-states in the latter half of the twentieth century, the land disputes were not fully resolved in most countries. The Ayt Khebbash people, for example, claim it is their natural right that they are the owners of the land where their ancestors lived, and which they passed on to their offspring for generations. Furthermore, they argue that the central government 'illegally' took the land from them by means of force. On the other hand, the authority insists that there are no tribes in the modern nation-state and that the land was 'legally' bought and registered by the Municipality, in order to foster the welfare of the whole local population – a claim which ironically obscures the actual influence of the Arab Sbbah tribal unit involved in the land sale.

Therefore, on the 10 April protest the Erfoud Municipality flatly turned down the petition signed by Ayt Khebbash people, on the ground that their tribal unit does not possess the right to distribute the land to its members under the *ḍahir* of 1919 and that their claim can be regarded as a serious threat to the social order of the modern nation-state. However, if we are to deny the right of 'legitimate ownership' under the state law, the modern Western perspective based upon a civil society model should be put into question. The 'legitimate ownership' in modern civil society is confined to the binary relations between the material object and the subject who possesses the right. However when we look at the logic employed by the international movement

claiming the indigenous land rights, this restrictive subject-object relationship has a possibility to be opened to a wider social context.[51] That is, the 'ownership' can also be defined as that of the unifying element between the ethnic communities which historically existed to nurture the individuals and the land which is not an object of sale but a holistic environment with multiplicious meaning, that has given birth to numerous myths, tales and beliefs which contributed to the creation of local world views.

The Ayt Khebbash resistance against the 'legitimacy' of state law, demonstrated in the incident of Kudyet Draoua dispute, shows that their historically formulated world view cannot be detached from the land, which is synonymous to their culture itself. As this conviction of righteousness is embedded in the reasoning that they are externally and internally justifiable 'owners' of the land and culture, the Moroccan administration's attempt to dissolve the tribal systems and identities into a centralised modern nation-state can be challenged.

The local people's strong attachment and reformulation of tribal identities, when claiming their property rights, should be viewed as a process in which they constantly negotiate their 'paroles of justification' according to their current necessities of everyday life – the necessities of *becoming* an 'Ayt Khebbash artisan'. The 'common sense' world view, which often outlaws the modern legal system, is generated through the process of ongoing everyday practices and interactions, where people negotiate traditions and recognise the relativity of meanings. In the course of the land dispute, the property rights were defined in a collective way based on tribal units, but also claimed in an individualised way, which demonstrates the contested process in which different groups dispute over the control of resources. Living in the modern world of cultural contradictions, the Ayt Khebbash people practice the identification processes wherein transition and stability co-exists: abandoning the past way of life in search of wage labour and housing in towns, but holding on to their tribal identities. Not surprisingly, these historically formulated and reformulated tribal identities remain at the core of an enduring form of social organisation in the Tafilalet, which is indivisible from the Ayt Khebbash men's processes of becoming an 'Ayt Khebbash artisan' and a Moroccan citizen in the town environment.

51 There are several studies which highlighted the genuineness of traditional culture as a justifying background of indigenous land rights, such as the studies on Melanesian *kastom* (tradition) and its transformations. See Trask 1991; Keesing and Tonkinson (eds.) 1982; Linnekin 1991; Jolly and Thomas (eds.) 1992.

4.7 Conclusion

In order to shed light on the identification processes in the communities of practice of the Ayt Khebbash artisans, we have seen the examples of apprenticeship in fossil sculpting, and then the commercial side of the domain. By looking at the case of the artisans with physical disabilities, I have demonstrated that they do not always move on to the level of 'full participation' but may permanently remain at the periphery of the community. Also, those who became skilled masters experience inner contradictions with their historically situated self, of which they attempt to make sense by resorting to supernatural beliefs. The Ayt Khebbash artisans' identification processes cannot be reduced to the concepts of 'mutual engagement' and 'negotiation', since it involves contradictory participation, which will not lead to more inclusive practice within the community. The skilled artisan Abdelhak participated in the apprenticeship and everyday work as a member of a community of practice including his friends and brothers, and is proud of his personal achievement in trilobite sculpting standards. However, his identity as a *mʕallem* is conflicted when he situates himself in the wider relations of economic and social inequalities which marginalise him in the town as a mere 'seasonal labourer'. As I shall discuss in chapter five, this sense of exclusion and marginalisation was even more heightened when the Ayt Khebbash artisans moved out of the Tafilalet region to engage in seasonal labour in the large cities, where they experience capitalist wage labour divorced from their own cultural context. In either case, the work-based identifications of the Ayt Khebbash men are contingent on multiply-situated power relations, wherein the dominance of specific norms and values organise the communities. For this reason the experience of the Ayt Khebbash artisans also involves a refusal of participation, since they cannot be fully engaged in a practice that marginalises their own 'traditions'. As I shall elaborate in the following chapter, the ways in which the Ayt Khebbash artisans respond, resist and appropriate the contradictions, result in 'multiplicious identifications' (Hodges 1998), which is an ongoing process of a historical reconstruction of the self.

I have discussed the artisans' reconstruction of social identities in the claim for property rights in Kudyet Draoua, which is a community they engage in outside of work. Their social practice within the town environment is strongly attached to their sense of belonging to the Tamazight-speaking group they interact with. However, there is a marked difference between their practice of everyday work and that of the claim for land rights. In the community of practice of fossil apprenticeship, the social relationships are more and more oriented towards the self, in order to learn and work

efficiently. On the other hand, in the community of protest claiming land rights, the 'traditional' kinship principle was reinterpreted and strengthened to reinforce their tribal solidarity for the purpose of the individual acquisitions of land.

In either case, the Ayt Khebbash people's identification processes are seemingly returning to the 'whole' but simultaneously oriented towards the 'self', because their sense of belonging is reconstructed for the people's current necessities of everyday life in the modernising context, where they encounter foreign entities, a new legal system, and a commodified market. The Ayt Khebbash people's changing needs of land and housing resulted in their claim for ownership of urban property by referring to a tribal identity, which is a manifestation of their collective interest in work as well. As the economic foundation of the old way of life, based on animal herding and agriculture, collapsed with the generalisation of monetary exchange, individual land purchase became mandatory to guarantee the security for work and family life. Therefore, many of the Ayt Khebbash people who cannot afford to buy a plot of land in town, turned to the collective notion of the 'tribal land' which helped justify their claim. This also demonstrates the identification processes of the Ayt Khebbash people as multiplicious, which are situated between the community of 'tribal entity' and the contingent encounters of individuals.

As discussed in chapter three, the Ayt Khebbash people's attempt to traditionalise modernities against the dominant discourse power, relates to their ongoing effort in claiming the position of power themselves. In the land dispute, some of the Amazigh groups who are generally not considered 'Ayt Khebbash', such as Ihadhuchin, also joined the protest and even became one of the leading members in the newly created association for Ayt Khebbash land rights. In this situation, they multiply their identities and consider themselves as 'Ayt Khebbash', contrary to their usual identification as belonging to a different group. This is an acute example of how the local people as acting agents manipulate the 'tradition', such as 'tribal roots' in social practice, and of their complicity in power relations.

According to Sennett, craftsmen are people with discipline and commitment, who have the desire to do something well for its own sake, with a sense of pride in work and accomplishment (2008). I have pointed out that this category is not applicable to the fossil artisans who consider their tasks as one of those mundane seasonal labours. Rather, the fossil apprenticeship of the Ayt Khebbash men should be seen as a pro-

cess in which they are crafting out the ways to conduct life with skill. In other words, they do not only obtain professional skills in the fossil domain but are also 'sculpting' the town by actively reformulating their tribal identities through participation in different communities. Therefore, the physical skill they acquire in the *ateliers* anchors that of the community of practice they engage in for commercial transactions, and to claim land rights in Kudyet Draoua. By demonstrating their collective interests in land acquisition, the Ayt Khebbash artisans articulate their communities in the work domain with another community, to reaffirm their tribal origins, which is in ever-changing process of renewal. In other words, collective survival for individualised objectives are at the core of their 'craftsmanship' in town, whether surviving consists in the search for food and housing, or in the pursuit for viable identities.

4-1 Rissani *suq* outside the southern gate

4-2 Sales of garments in Rissani centre

4-3 Moulay Slimane Quarter in Rissani

4-4 Fossil extraction site Amal

4-5 Carrying raw ammonites

4-6 Unloading the raw materials

4-7 *masetta* (top) and *chicago* (middle and bottom)

4-8 A fossil artisan working with *ziyar*

4-9 *Dynamo* 380v

4-10 Disk *diamante*

4-11 Rock cutter in a large scale *atelier* in Erfoud

4-12 Bosch

4-13 Fossil artisan street in Moqaouama Quarter

4-14 Sculpting a Fatima's hand

4-15 Trilobite sculpting with *chicago*

4-16 Cutting a rock

4-17 Sculpting an ashtray using *masetta*

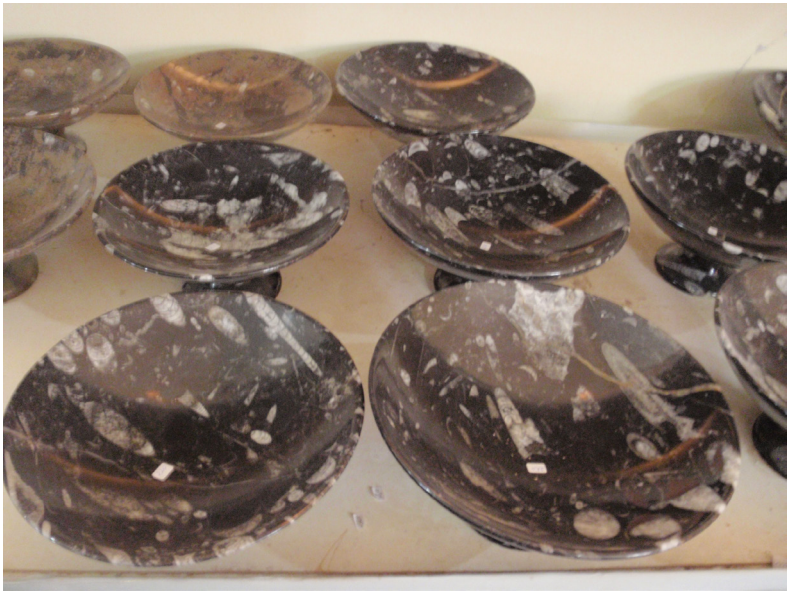
4-18 Working on a fossil plaque using *bosch*

4-19 Pasting orthocerus

4-20 Polishing orthocerus

4-21 Finished orthoceruses

4-22 Polished ammonites



4-23 Ashtrays

4-24 Decorative objects 1

4-25 Decorative objects 2

4-26 Mirrors and washbasins

4-27 A decorative table

4-28 A fountain

4-29 Trilobites

4-30 Commerce of fossil objects

4-31 A fossil shop in Moqaouama

4-32 The Shishan demonstration on 10 April 2012

4-33 Signing a petition

4-34 Kudyet Draoua inhabitant in front of her house

4-35 The demonstration on 23 May 2012 in Ar-Rachidia 1

4-36 The demonstration on 23 May 2012 in Ar-Rachidia 2